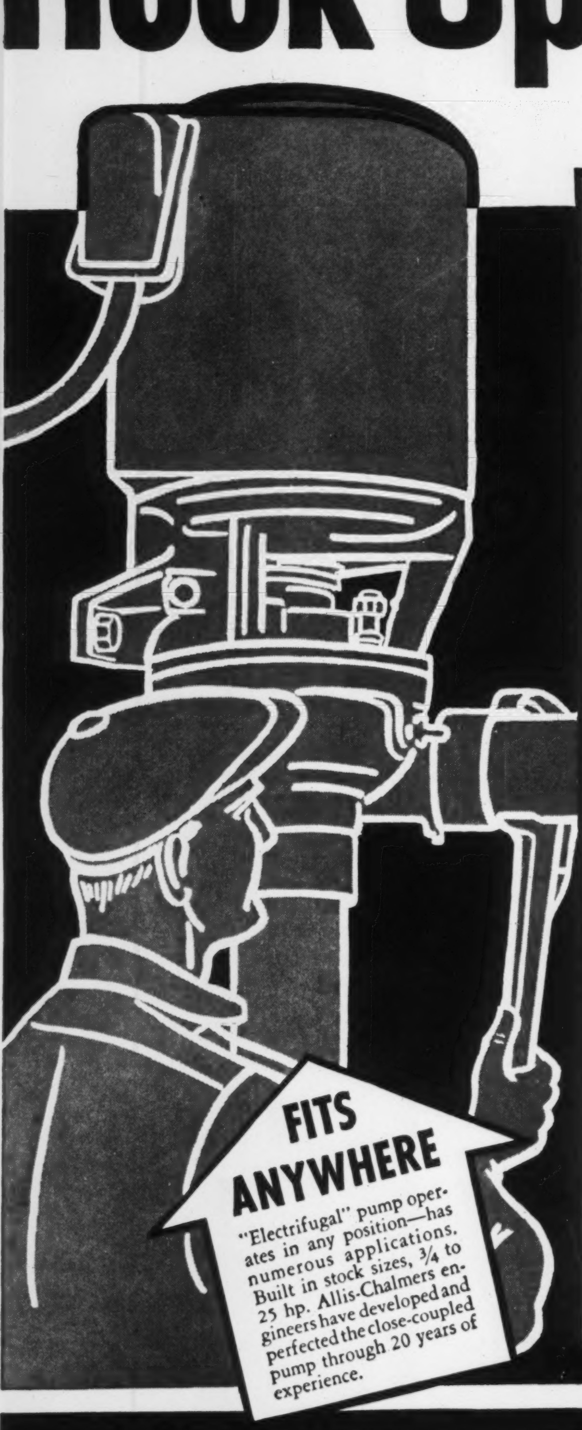
ENGINEERING NEWS-RECORD

Ministry of Health building in Rio, scene of first Inter-American Sanitation Conference

Hook Up...AND Pump!



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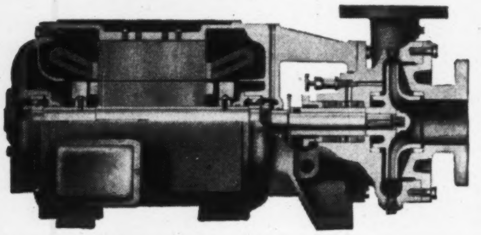
"Electrifugal" pump operates in any position—has numerous applications. Built in stock sizes, ¾ to 25 hp. Allis-Chalmers engineers have developed and perfected the close-coupled pump through 20 years of experience.



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Motor and pump are built into one rigid frame, with rotor and pump runner on a single shaft. Result: one third less space — fewer parts — *lower cost.*

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Ample bronze wearing rings, bronze water seal and valve — shaft sleeve and deflector — five packing rings — precision workmanship — and other quality features all add up to longer life, less maintenance cost.

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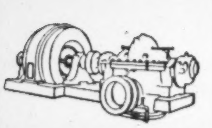
***Electrifugal* PUMPS**



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News of the Week

ENGINEERING NEWS-RECORD • JULY 4, 1946 • VOLUME 137 • NUMBER 1

Government moves to break building supply black mart

OPA files charges against Pacific Coast lumber firms, promises action in other fields—News-Record survey reports show active over-ceiling lumber dealings

While reports from *Engineering News-Record* correspondents last week strengthened the statement that the shortage of lumber—and its attendant black market—is the nation's worst building bottleneck, government agencies began a two-pronged drive to bring lumber prices into line and increase legitimate production.

In federal courts in California, Washington, Oregon and Arizona the Office of Price Administration filed 40 suits against Pacific Coast lumber firms, seeking a total of about $9,000,000 in treble damages on charges of illegal activities involved in handling some 65,000,000 ft. of lumber. The OPA charged that shippers had diverted lumber by shipping it to themselves at dummy addresses and holding it there for bargaining; and that mills were producing out-size timbers in order to charge premium prices.

In Washington, meanwhile, the National Housing Agency, OPA, and the Treasury and Justice Department said in a joint announcement that they would combine their resources to bring the activities of producers, truckers, distributors—and consumers—under scrutiny in an effort to channel lumber and other building supplies into legitimate operations and trade arteries.

Survey points up lumber

The *Engineering News-Record* 12-city survey of building material supplies, general conclusions of which were published in the June 27 issue, vol. p. 963, pointed up the reports of black market activity in lumber, and listed a variety of means by which greater-than-ceiling prices are being obtained for the material.

For example, *ENR's* Cleveland, Ohio, news bureau reported that the supply on hand in Cleveland yards is so far behind demand that most contractors have turned to obtaining their lumber directly from southern mills, trucking the material home at their own expense, and reportedly paying retail prices in the southern mill yards. Some local yards have been able to procure 12 x 12 timbers and have recut them to obtain 2 x 4's, which are commanding prices $20 to $25 above ceiling. Oak flooring, manufactured locally is commanding up to $325 per thousand feet.

At San Francisco, heavy timbers are being delivered, causing contractors to stand the expense of cutting the lumber to required sizes. Most of the lumber is green. Seattle, Wash., reported a similar situation, with the added "twist" that buyers often obtain lumber by buying an "option" on the lumber mill itself, and then—by agreement—failing to exercise the option, thus providing an extra fee to the mill selling the lumber.

Reports from Atlanta, Ga., said that in recent transactions, a thousand feet of green lumber was sold at a mill for $90 a thousand feet—far over OPA ceilings for short-leaf yellow pine. In Texas, also, despite admittedly inferior quality, black market lumber is bringing as much as 50 percent over ceiling prices—most of it supplied by small mills.

ENR's Minneapolis, Minn., correspondent reported that in that area, portable saw mills have been set up all over the northern part of the state, and are apparently sawing and selling green lumber direct to buyers almost "right out of the forest." St. Louis, Mo., also reported an active lumber black market, with timbers selling for $10 to $25 above ceiling prices.

SURPLUS ARMY MATERIALS AVAILABLE FOR VETS' HOUSING

Salvaged lumber and critical building materials from surplus Army installations will start to become available to builders for the Veterans Emergency Housing Program in less than 60 days, Lieut. Gen. Edmund B. Gregory, War Assets Administrator, and Wilson W. Wyatt, National Housing Expediter, announced June 23.

Army awards Pacific, Alaska contracts

Contracts for troop housing at Pacific Ocean bases amounting to more than $72,000,000 have been awarded by the Army Engineers, the War Department announced June 21. A contract for architect-engineer services and for construction of postwar Army facilities in Alaska totalling approximately $25,000,000 also has been awarded.

The contracts for the work in the Pacific were negotiated through the new Western Ocean Division of the Corps of Engineers, of which Brig. Gen. L. D. Worsham is division engineer. Robert and Co., of Atlanta, Ga. are architect-engineers and Morrison-Knudsen, Inc., of Boise, Idaho and Peter Kiewit Sons, Inc., of Omaha, Neb., are contractors for the housing in the Mariannas and Honolulu —the contract amounting to $23,572,040.

Weihe, Frick and Kruse of San Francisco, Calif. are architect-engineers on the $29,446,190 project in the Philippines. The constructing contractors are Johnson, Drake and Piper, of Freeport, N. Y.; The Utah Construction Co., Ogden, Utah, and Grove, Shepherd, Wilson and Kruge, Inc., of New York City.

Holmes & Narver of Los Angeles, Calif., are architect-engineers for the Okinawa Project, amounting to $19,234,420. Constructing contractors are the Guy F. Atkinson Co., of San Francisco, and J. A. Jones Construction Co., Charlotte, N. C.

The work in Alaska includes expansion of technical and housing facilities at Ladd Field at Fairbanks, and at Fort Richardson, Anchorage.

The firm of Fay, Spofford & Thorndike, Boston, Mass., was awarded the contract for the Alaskan architect-engineer services at approximately $900,000. Birch, Johnson & Lytle, with offices in Seattle, were awarded the construction contract in the amount of approximately $24,000,000.

NEWS IN BRIEF

In telegraphic form, here are latest news developments on the engineering and construction front during the week.

Construction—East Ohio Gas Co. of *Cleveland* has announced a $12,000,000 expansion program to increase total gas transmission capacity from 355 million cfd. to 474 million cfd. . . . The University of Illinois, *Springfield,* will spend $800,000 for improvements. . . . A $14,000,000 Hotel Statler is proposed for *Los Angeles, Calif.* . . . Methodist churches in *Florida* will spend $6,000,000 on new buildings. . . . Pennsylvania Salt Mfg. Co. has begun a $1,000,000 chemical plant on Willamette River near *Portland, Ore.* . . . Plans have been approved for a privately-financed garage under the common at *Boston, Mass.* . . . CPA has approved plans for a $4,000,000 expansion of the wheel plant of the Bethlehem Steel Co. at *Johnstown, Pa.* . . . A new building for an engineering, administrative and research center for the Standard Oil Co. will be built at *Hammond, Ind.* . . . The *Louisville, Ky.*, conference of the Methodist church has announced plans for a new $2,000,000 hospital. . . . A $1,396,889 contract for the construction of Cascade Dam on the North Fork of the Payette River in *Idaho* has been authorized for award to Morrison-Knudsen Co. . . . Legislation providing for a $5,000,000 extension of the *Boston-East Boston* subway has been signed by Governor Maurice J. Tobin. . . . The Liggett and Myers Tobacco Co. is planning a $3,000,000 factory at *Durham, N. C.*

Highways—*Florida* is speeding up widening and resurfacing of existing highways—projects that can be planned quickly and carried out with available materials. . . . The *North Carolina* Highway Commission has called for bids on an estimated $4,853,200 of broadening and paving 299 miles of secondary roads. . . . In May $2,524,956 in contracts were awarded by *Illinois* for construction of 36 miles of new paving and for 14 bridges. . . . The *Washington* State Highway Department plans about $150,000,000 worth of highway projects in the near future. . . . The State Highway Commission in *Georgia* has approved Governor Arnall's new $2,225,000 roadbuilding program to be financed with state funds only. . . . The *British Columbia* public works department plans to spend $1,000,000 on surfacing highways this year. . . . A low bid of $299,199 was received for the improvement of State Ave. and connecting arteries in *Kansas City, Kan.* . . . What is said to be the first postwar farm-to-market road to be finished in the United States under the nation-wide $900,000,000 3-year program, is near *Canyon, Tex.* It is a permanent paved road extending 20 miles from Wayside to U. S. Highway 87. . . . In the fourth letting this year *Alabama's* highway department received bids totalling nearly $2,500,000 for 14 road and bridge projects in 12 counties. . . . The *Missouri* highway department has allotted $8,000,000 to its maintenance bureau for the reconditioning of roads during the next fiscal year. . . . Construction contracts of $750,000 have been approved by the *Nevada* State Highway Department for rural highway work in three counties.

Bond Issues—*Spokane, Wash.*, approved a $1,700,000 issue for a sewage disposal plant and other projects. . . . A $1,950,000 bond election for various improvements will be held at *Columbus, Ga.*, July 17. . . . Bond issues totalling $57,225,000 will be submitted to *Houston, Tex.*, voters July 27.

Water and Sewerage—The $179,000 South Side sewer at *Pekin, Ill.*, has been authorized. . . . The Federal Works Administrator has advanced funds to *Winston-Salem, N. C.*, for the preparation of plans and specifications for waterworks improvements to cost an estimated $2,500,000. . . . Preliminary designs for the $3,000,000 East Bank interceptor sewer have been approved at *Dallas, Tex.* . . . The completed Schofield reservoir in central *Utah* is furnishing water to farms in Carbon County and creating new recreational facilities. . . . Construction of a sewage disposal system in the south *Sacramento, Calif.*, area is assured by the recent approval by local residents of a $1,000,000 plan for financing the work.

Top pay, low cost house; builder fined

Although Morris Bluestone, Canton and Massillon, Ohio, builder, managed to complete a group of small homes for sale at a figure nearly $2,000 below OPA ceilings, he did the work by paying higher-than-average wages, and will be penalized $15,000 on income-tax deductions, according to a decision of a Wage Adjustment Board panel at Cleveland.

With labor members of the panel dissenting, a majority opinion by the panel ruled that Bluestone's action was not "a mere technical infraction", but was "directly inflationary."

In hearings before the panel (*ENR* May 23, vol. p. 815) Mr. Bluestone testified that he paid higher rates than the established wage scale, but claimed that by using only top men, his total labor cost per house was less than if he had used run-of-the-mine labor. The board established that the contractor was able to sell 5-room houses—for which the OPA ceiling is $7,250—for $5,850.

The majority opinion commented that "the overpayment by Mr. Bluestone could lead only to spiral-bidding for the limited labor force available. If such overbidding (for labor) were not stopped, the largest commercial builder could monopolize construction labor."

In a minority dissenting opinion, labor members of the panel opposed the penalty as "disproportionate", and pointed out that although the contractor admitted paying "illegal" wages, he "insisted on top-grade mechanics . . . men who were able to produce quantities above the average. For example, he said that some carpenters paid at the rate of $1.50 per hour hung only two doors a day—but a man paid $2.00 an hour hung sufficient doors in one day to make this hourly rate, on a unit basis, much cheaper."

Several contractors, testifying for the government, contended that Bluestone's houses were poorly built, the walls warped and cracked, and that construction was not up to standard.

The labor dissent discounted this testimony on the ground that "it was given by contractors operating in the same area and on a competitive type of home", and pointed out that buyers of Bluestone's houses were able, after short occupancy, to sell the structures "for as much as $2,000 above the purchase price originally paid."

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Pacific Northwest earth shock rated one of severest on record in that area

Bridges, highways and buildings damaged, while quake rocks Seattle for almost two minutes—Freak effects recorded

The Pacific northwest on June 23 surveyed heavy damage from one of the most destructive and longest earthquakes ever recorded in that area.

In the wake of the shock, which shook the entire coastal area and was recorded around the world, were two dead; a damaged bridge; cracked highways; a huge new crevasse in a mountain glacier; crumbled chimneys and building walls, and very busy seismologists.

Striking at 9.14.30 Sunday, the quake rocked Seattle for more than 110 seconds, flipping needles from both of two seismographs at the University of Washington, putting new cracks in Sears Roebuck's 10-story building damaged Feb. 14 by another quake (*ENR* Feb. 20, vol. p. 323) and cracking plaster in homes throughout the city.

While Prof. G. E. Goodspeed, University of Washington geology expert, rated the shock as No. 5 in intensity, its "amplitude" being even greater than the one in February, which was rated as a No. 7 quake, he said.

"The needles of both seismographs were kicked from the drums by this shock and only one was knocked off by the previous shocks," he explained.

Professor Goodspeed added that disturbances were recorded for almost 45 minutes on the one seismograph which jumped back on the drum after the initial shocks. The previous shock in February, he said, created disturbances which lasted only about 20 minutes.

Sunday's quake lacked the suddenness and violence of the earlier shock, being of a more gentle, swaying and undulating motion although the movement was greater.

While seismologists, including those of British Columbia who placed the epicenter in a more northerly section of the coastal area, compared notes, Professor Goodspeed said there was a possibility the quake had no definite epicenter.

"This was a decidedly unusual tremor," he added. "Its duration was greater than any on record and it would appear likely that the slippage occurred deep within the earth's crust. It is my belief the epicenter may well extend all along the coast for about 100 miles north and south from Seattle at a point about 40 miles west of the city."

The shock was recorded on seismographs around the world. Dr. Roy K. Marshall, director of the Fels Planetarium at Franklin Institute in Philadelphia describes it as one of "terrific amplitude."

The glacial crack—more than 20 ft. in width and accompanied by a thunderous rumbling—occurred high in the Cascade Mountains in western Washington in a low-lying glacier on a 6,000-ft. peak. Millions of tons of glacial ice slipped and crunched down the mountainside. The crack occurred at the head of the glacier on Big Four Mountain, where the width was only 80 ft.

The foot of the glacier, some 2,000 ft. across, did not advance, the center of the ice pack apparently absorbing the compression.

In British Columbia it was reported a piece of land 250 by 100 ft. slid into the sea from a promontory on Vancouver Island, causing a huge wave to swamp small craft anchored offshore.

East of Seattle, a bridge across a deep peat bog into which piling was driven to give adequate footing for a span which links the Sunset Highway with the Lake Washington floating bridge, was cracked and thrust several inches out of line. The decking dropped some four inches and was twisted sideways by the heaving ground beneath it, highway engineers said.

Start surveys for aerial tramway for California

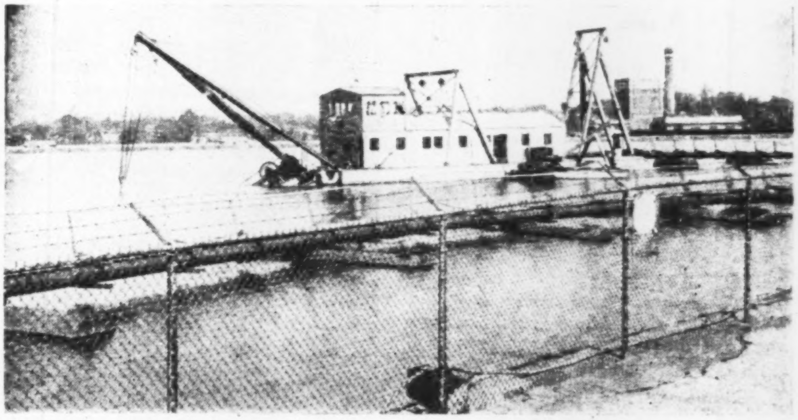
Final survey work has started on the 12.400-ft. aerial tramway near Palm Springs, Calif., according to reports from the office of Earl Coffman, chairman of the Mount San Jacinto Winter Park Authority. The report in *ENR* for June 20, vol. p. 953, that contracts for actual construction of the tramway had been let was incorrect. Only the survey work has been started.

Financing of the survey is being shouldered by the Consolidated Steel Corp., Los Angeles, which is interested in the final construction contract. Associated with Consolidated in the pre-contract phase of the project is Morrison-Knudsen Co., which is working out plans for access roads, tower foundations, and operating machinery buildings, while American Steel & Wire Co. is studying tramway operation problems.

In charge of the survey at the present time is Gordon Bannerman, engineer for American Steel & Wire, builders of the aerial tramway at Franconia Notch, New Hampshire, in 1937. (*ENR* July 7, 1938, p. 12.)

The 1945 California legislature created the Mount San Jacinto Winter Park Authority and approved the sale of revenue bonds not to exceed $3,000,000. (*ENR* Nov. 29, 1945, vol. p. 709.)

Bids on the tramway's construction are expected to be called soon after the survey is completed. The authority expects the complete report should be in their hands by late August.



Sea Dredge Works in Fresh Water Reservoir*—Philadelphia, Pa., residents last week watched a deep-sea dredge hard at work in a land-locked city reservoir as water department officials began action to remove some 350,000 tons of silt that had more than halved the 277-mg. capacity of the old Queen Lane reservoir. The big dredge, equipped with a 16-in. pipe, and electric-powered to eliminate obnoxious discharges, was dismantled, hauled by rail from Atlantic City, N. J., and welded together on the site. Silt is being used to reclaim irregular land, and officials hope that the state's current stream-cleanup campaign will eliminate future troubles of this nature.*

DEVELOPMENTS BEYOND U. S. BORDERS

Digested from reports by Engineering News-Record correspondents and the McGraw-Hill World News Bureau

Inter-American regional conference of sanitary engineers at Rio lays groundwork for permanent organization—French to spend $55 million for U. S. construction equipment—British plan bridges.

RIO DE JANEIRO—Sanitary engineers from eight American nations, including the United States, wound up five days' meetings here June 14 with the decision to push for creation of a permanent inter-American organization of sanitary engineers. The plan may become a reality at another regional conference scheduled for September at Caracas, Venezuela.

The Rio parley—called the Inter-American Regional Conference of Sanitary Engineering—brought together representatives of Brazil, Chile, Peru, Bolivia, Uruguay, Paraguay, and the United States. Argentina also was represented, but not with the full delegation that had been expected.

The Caracas meeting is to include representatives of all the other Latin-American countries, plus the United States. Before then, the proceedings of the Rio sessions are to be published, and a definite plan for the permanent organization probably will be presented. Tentatively it provides for a board of directors representing each of the 21 Pan-American countries, annual meetings and the naming of a secretary each year in the country that is to play host the following year.

The Rio meetings brought together many men facing mutually similar problems who had previously had little or no contact with each other. As an extreme example, delegates mentioned that several sanitary engineers from Rio de Janeiro and Sao Paulo—about 250 miles apart—made each others' acquaintance for the first time.

Sessions and inspection trips

Sessions were held June 10-14 in the new Ministry of Education and Health building, frequently called "the house on stilts," because of its exposed columns on the ground floor (see accompanying picture for other details).

Day after the formal meetings were over, most of the sanitary engineers flew off to Governador Valladares, in the state of Minas Geraes, to look over the work done in sanitation of the Rio Doce Valley (see *ENR* Dec. 30, 1943, vol. p. 954 for a description of project). Following this, three days were spent in the state of Sao Paulo, inspecting water, sewage and power plants.

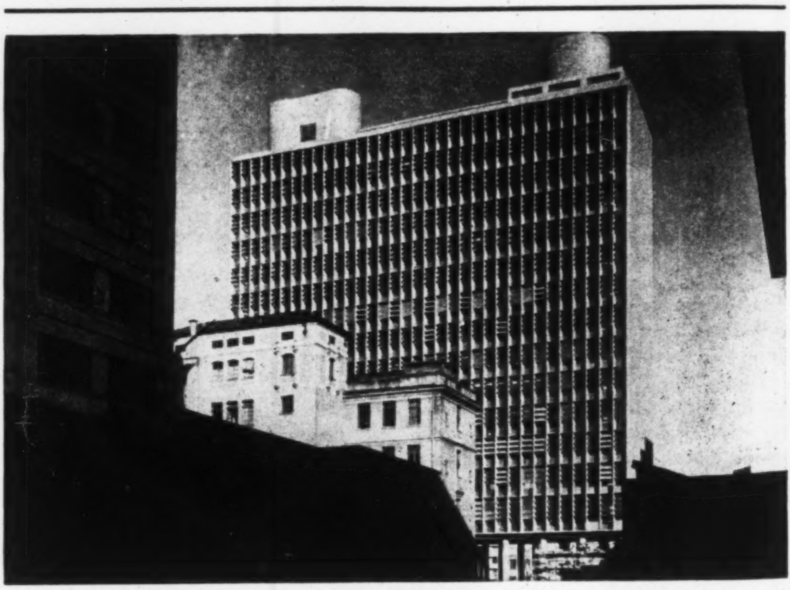
All thirteen Americans who attended spoke at one time or another during the sessions. They were: Col. Harold B. Gotaas, president of the Institute of Inter-American Affairs; Clarence I. Sterling, chief engineer of the institute; H. W. Streeter, director of the water and sanitation investigations station of the U. S. Public Health Service; Herman G. Baity, professor of sanitary engineering, University of North Carolina, Victor W. Ehlers, chief engineer of the Texas State Board of Health, H. A. Whittaker, chief engineer of the Minnesota State Department of Health; Gordon M. Fair, professor of Sanitary Engineering and recently appointed dean of the Graduate School of Engineering of Harvard University.

Also: A. E. Griffin, director of technical service, Wallace & Tiernan Co., Newark, N. J.; Donald L. Snow, of the Pan-American Sanitary Bureau; Abel Wolman, president of the sanitary engineering commission of the Pan-American Sanitary Division, Ralph E. Tarbett, sanitary engineering director, U. S. Public Health Service; Carl M. Westphal, of The Dorr Company, Rio de Janeiro, and E. E. Brainard, of the Lock Joint Pipe Company, Ampere, N. J.

Affiliation with UN sought

One resolution which came out of the meetings would make the Pan-American Sanitary Bureau (which is a branch of the Pan-American Union) a part of the United Nations organization. At the same time, the conferees offered the services of the proposed inter-American organization of sanitary men to the United Nations.

Delegates generally said they felt that by setting up an organization of sanitary engineers they could facilitate the work of the Pan-American Sanitary Bureau in standardizing sanitary regulations. They pointed out privately the inadequacies of many existing rules, and even the complete lack of regulations in some sectors of sanitation.



Conference Headquarters—*First Inter-American meeting of sanitary engineers in Rio de Janeiro on June 10-14 was held in the spectacular building of the Brazilian Ministry of Education and Health. A reinforced concrete structure, it features a system of movable sun shades over the entire north facade. The thin-slab floors, cantilevered out about 4 ft. beyond the interior window face, combined with similar vertical slabs, form an egg-crate pattern in which are contained adjustable louvers of asbestos set in steel frames.*

Machinery . . . .

As part of a $9,600,000,000 purchasing program during the next four years, the French government will spend about $55,000,000 for U. S. made construction equipment. Total purchases of construction equipment are expected to amount to about $80,000,000.

The purchases will be made under a five-year plan made public by Foreign Minister Jean Monnet, and made possible in part by recently-granted U. S. credits of $1,400,000,000. Aim of the program in general is to rehabilitate the war-destroyed French industrial machine by purchase abroad of raw materials, production machinery, farm machinery and other items.

Purchasing—excepting that for government-owned industries or public works projects—will be handled by private business agents, although the French Supply Council, 1330 Eighteenth Street, Washington, D. C., will act as supervisor for the government.

Possible orders for American construction equipment break down into: $15,000,000 for machinery and equipment for the building materials industry; $30,000,000 for public works of all sorts, including machinery for bridge and port reconstruction, road building and other projects; and $10,000,000 for other sections of the construction industry.

With many French bridges and harbors still in need of permanent reconstruction, heavy construction equipment was given a high priority in the Monnet plan, which also called for the construction of new dams designed to boost the nation's hydro power potential to more than 20 billion kwh annually by the end of the year 1950.

Housing . . . .

Puerto Rico—An American construction firm has just started building a 3,000-unit housing project at San Juan that will cost $18,000,000, and may eventually be extended to include 9,000 units at a total cost of $30,000,000.

Officials of the Long Construction Co., Charleston, S. C., said the houses will be flat-roofed, bungalow-type, built of concrete block, with concrete roofs and girders and floors of native tile. The 3,000 units may be complete in nine months.

Mexico—Spurred by the needs of a population that has grown from about 1,700,000 to more than 2,000,000 in the last five years. The Municipal government of Mexico City recently set up a semi-official Bank for the Development of Housing, with an initial capital of more than $2.000.000 to survey the city's needs and work out a program for construction of low-cost housing units that the average citizen may hope to own after a period of years during which he would pay a relatively small monthly charge.

A recent survey of homes available for "working class families" showed that of 157.342 such dwellings, 46.168 are built of adobe, 70,057 of brick, 16,091 of timber and 13.468 of masonry.

Bridges . . . .

England—A suspension bridge nearly a mile in length, with a main span of 3,000 feet, is planned for construction soon across the Severn River about seven miles upstream from the city of Bristol. According to the British Transport Ministry, construction of the new bridge will start in about four months, at the conclusion of a series of aerodynamic and other investigations of the site.

The bridge will be a part of a general program to improve connections by highway between Bristol and its tributary areas and London.

As described by the transport ministry, the bridge will have two side-spans of 1,000 ft. each, and a main span of 3,000 ft., providing a deck width of about 100 ft. over all.

Miscellany . . . .

Ecuador—Only two links—totalling less than 150 miles—remain to be built to complete Ecuador's section of the Pan American Highway, as the government pushed extensive roadbuilding programs throughout the country.

Puerto Rico—Work is being rushed on the mooring facilities and shore connections for a floating power plant, purchased by the Puerto Rico Water Resources Authority (at about $2,700,000) for use as a supplemental power source for lighting and other services to the San Juan suburb of Santurce.

Peru—The Peruvian embassy at Washington has been instructed to contact U. S. construction firms that specialize in the construction of highways and railroads who may be interested in investing capital to build highways, railroads and irrigation projects in Peru. Information is obtainable by correspondence with C. Donayre, Commercial Attache, at the embassy at 1320 Sixteenth street, N. W., Washington, D. C.

Puerto Rico—About $8,000,000 will be spent during the fiscal year 1946-47 by the Insular Aqueduct and Sewer Service for development of new supply systems for San Juan, Ponce and other large cities in the island.

Water Supply . . . .

Australia—An extensive water supply program to increase available reserves for its agricultural areas has been proposed by the government of western Australia, on condition that the Commonwealth government assist the program financially to the extent of about $2.000,000 yearly over a ten-year period.

The program would provide permanent supply to areas in the southwestern portion of the state, comprising about 12,000,000—most of it wheat-land—by raising Wellington Dam to increase its capacity from 23,000 to 116,000 a.ft.; and increasing the capacity of Mundaring Weir Dam from 14,000 to 46,000 a.ft. Other features of the 10-year scheme provide for expansion of capacity of pumping station to increase supplies to gold mines in the central portion of the state, and construction of a steel pipeline across the Darling Mountain range to supply southern agricultural areas.

Russia — Work has been resumed on construction of the Orto-Tokoi Reservoir in the Kirghiz Republic, one of the largest projects in the Central Asia Five Year Plan.

Planned to collect the floodwaters of the Chu River, the dam will create a lake six miles long and 1.8 miles wide which will feed two irrigation canals watering a total of 80,000 hectares.

It is estimated that the dam will take more than 3,000,000 cu. yds. of soil and that excavation work will exceed 4,000,000 cu. yds. It will be 185 ft. high, 1,030 ft. long, 1,600 ft. wide at the base and about 45 feet wide at the top. It will be built entirely of earth because of frequent earthquakes in the region.

An 1,800-ft. tunnel 16 ft. in diameter will carry off the water.

Pluto . . . .

England — The approximately 1,500 miles of flexible pipe spun into 21 pipelines by Allied military engineering genius to provide smoothly-flowing fuel supplies to invading armies during the Battle of France in 1944 will shortly find another use.

The British Ministry of Supply, seeking supplies of lead for use in urgently-needed home construction, announced last week that it would seek to recover the pipe in order to salvage the more than 15,000 tons of lead that went into their manufacture.

Using specially-equipped boats, crews will grapple for the pipelines, and—when the lines are secured—reel them up on giant bobbins at the rate of five to six miles per hour. It is hoped to complete the recovery this year.

Start of big Arizona water project called for by bill now in Congress

Construction would include Bridge canyon dam on the Colorado River and a long tunnel and canal to deliver irrigation water

In an effort to get action on the long discussed plan to deliver Colorado River water to central Arizona for irrigation purposes, Senators McFarland and Hayden of Arizona have introduced into the Senate a bill calling for the construction of the necessary dams, canals and tunnels to deliver water to central Arizona by the so-called Bridge Canyon route. A similar bill is to be introduced in the House.

Three possible routes for the delivery of Colorado River water to central Arizona to supplement the dwindling supplies there have been under discussion for many months (*ENR* May 24, 1945, vol. p. 742.) These were (1) Marble Gorge route, calling for a high dam on the Colorado River above the Grand Canyon and 143 miles of tunnel to deliver water to a point high up in the Verde River valley; (2) Bridge Canyon route, calling for a high dam on the Colorado below Grand Canyon, 78½ miles of tunnel and 235 miles of canal; and (3) the Parker pumping project, which would pump water from the reservoir behind Parker Dam to reservoirs and canals serving central Arizona. In October of last year the Bureau of Reclamation submitted informally to the Colorado Basin states a tentative draft of a report comparing the through routes in which the Marble Canyon route was practically eliminated from consideration.

Under the bill now introduced into Congress (S. 2346) the Secretary of the Interior is authorized to build the Bridge Canyon Dam on the Colorado River, drive the necessary tunnels and build the canals required to deliver Colorado River water to supplement the waters of the Salt and Gila rivers in Arizona, subject to the terms of the Colorado River Compact and the water-delivery contract between the United States and the State of Arizona, and to maintain and operate the works so built. Under the water delivery contract, the United States agrees to deliver from storage in Lake Mead so much water as may be necessary for beneficial consumptive use in Arizona of a maximum of 2,800,000 acre-ft. of water, subject to the availability thereof for use in Arizona under the provisions of the Colorado River Compact and the Boulder Canyon Project Act.

Before any construction work is put under contract, the Secretary of the Interior has to determine whether there will be a market for the power and water service adequate in his judgment to insure payment of all expenses of operation and maintenance and the repayment within 50 years from the date of completion of the power facilities of the amount charged to power with interest at 2 percent, and repayment of the amount charged to irrigation is not to exceed 80 years without interest. (The present period is 40 years at 3 percent interest.) The federal government will bear the portions of the cost charged to flood control, silt control, river regulation, recreation and wild life purposes.

Construction of the Bridge Canyon dam and power plant, the tunnels and canals, was estimated in the Bureau of Reclamation's tentative report at $1,310,-625,000. Bridge Canyon dam would be 673 ft. high, thus making possible the generation of a large quantity of power at the site, which is at the upper end of the reservoir behind Boulder Dam.

Under normal procedure, Congress does not authorize the construction of a project of this kind until it has before it the report of the Bureau of Reclamation, expected early in 1947.

Reclamation Bureau acts in S. W. water crisis

A Bureau of Reclamation program to meet power and food-production shortages in central Arizona and southwest New Mexico, (*ENR* April 18, vol. p. 529 and June 27, vol. p. 968) was presented to Acting Secretary of the Interior Oscar L. Chapman by Commissioner of Reclamation Michael W. Straus on June 20.

This emergency program entails:

(1) Temporary installation of large railway-mounted generation equipment immediately;

(2) Provision for the generation and importation of additional power from "standby" steam plants in southern California;

(3) Pooling of all public power generation facilities in the area through the interconnected transmission system, thus making maximum power for irrigation pumping available in the most critical areas.

Storage in Salt River and Carlsbad reservoirs has been decreasing gradually during the last five years because of insufficient rainfall and low runoff. The Carlsbad reservoirs are virtually dry and only summer rains can save the crop.

By the end of the current year, Salt River storage will be nearly exhausted, and by fall power production will have fallen from two to three hundred million kilowatt-hours short of normal requirements.

Half Missouri basin work contracted

In a progress report released June 19, General Lewis A. Pick declared that more than 50 percent of the $39,000,000 U. S. Army Engineer construction program in the Missouri Basin has been obligated to date, with the remainder expected to be placed under contract by this July 15. Funds for this work were allotted by Congress in the 1947 fiscal year appropriations and the deficiency bill of last December.

Twelve contracts already have been awarded or are in the process of being awarded, in this fast-moving construction schedule. Virtually the entire $6,000,000 available for the construction of the Garrison Dam in North Dakota has been obligated. It involves four contracts covering the construction of an access highway and an access railroad, a construction bridge over the Missouri River and the construction of a small city near the damsite to house workmen on the project.

Work started at Kansas City

Two projects are under construction at Kansas City; one for a floodwall to protect the Central Industrial District and the other a levee to protect the Municipal Airport and part of the industrial area of North Kansas City.

Other projects on which construction has been started include the completion of the Kanopolis Reservoir on the Smoky Hill River in Kansas, and the erection of prefabricated houses for construction workers at the proposed Fort Randall reservoir project on the Missouri River in South Dakota. Bids will be advertised for construction on an access highway to this dam in July, and for an access railroad shortly thereafter.

To begin Cherry Creek Dam

Within a few days, reported General Pick, contracts are expected to be awarded for construction of flood levees to protect Omaha, Neb., and Council Bluffs, Iowa. Bids were received June 18 and a contract is expected to be awarded shortly for initial construction on the Cherry Creek reservoir project near Denver, which will furnish flood protection for the industrial area of that city and provide some water for irrigation.

ASTM convention names new officers; views new testing equipment, methods

Group's 49th annual session at Buffalo, N. Y. marked by variety of meetings—Rename executive committee as directors

Members of the American Society for Testing Materials met at Buffalo, N. Y., June 24-28 in their 49th annual session, to compare notes on technical progress during the past year, and elect new officers.

Emergency alternate provisions and emergency standards, which served a useful purpose during the war, are to be discontinued as such after July 1, 1946 it was decided. They may be dropped or incorporated in the standards of the various committees.

One example of research important to the construction industry that is now under way involves the weldability of A7 structural steel. In a preliminary report to the subcommittee on structural steel for bridges, buildings and rolling stock, the belief was expressed that for statically loaded parts of buildings and for highway bridges having a fair proportion of dead load stress included in the total stress, A7 is satisfactory up to 1½-in. thickness without special technique, and above that thickness can be kept so by proper technique. For railroad bridges, A7 steel is satisfactory up to 1-in. thickness without special technique, and above that thickness is likely to be of a composition necessitating preheat and possibly other special technique. Further studies are being made, and a specification may be developed for a steel to be used when greater thicknesses are to be welded.

New committees

Expanding technical activities, the society has established the following new committees of interest to the construction industry: E-6 on Methods of Testing Building Constructions; E-9 on Fatigue, which will include the existing research committee on fatigue of metals; Asbestos-Cement Products; and Oxychloride Cement, covering the application of this material in floors and in refractones, waterproofing and heating compounds.

An important step taken during the year in reconverting society affairs to a peacetime basis was in administrative and staff reorganization. Perhaps, the most significant action was amendment of the charter to substitute a board of directors for the executive committee. The present ten members of the executive committee have had one year added to their present terms and will serve as directors, and five new directors were elected at the annual meeting.

New officers, introduced at the meeting, are: Arthur W. Carpenter, manager of testing laboratories, the B. F. Goodrich Co., president and R. L. Templin, assistant director of research and chief engineer of tests, Aluminum Co. of America, vice president. Directors are: A. G. Ashcroft, Yonkers, N. Y.; J. H. Foote, Jackson, Mich.; F. E. Richart, Urbana, Ill., and L. H. Winkler, of Bethlehem, Pa.

An exhibit of testing apparatus and related equipment, in progress throughout the week, included a large number of new instruments and laboratory equipment, many of them shown for the first time. Emphasis was given to improvements in many of the older lines of equipment. Simultaneously, a photographic exhibition and competition of the theme "Materials, Testing and Research", was held.

The retiring president, John R. Townsend, materials engineer, Bell Telephone Laboratories, Inc., gave an address on "The Challenge of National and International Affairs to the Engineer," and the guest speaker, B. J. Sandwell, editor of *Saturday Night*, a Canadian publication, spoke on "A Testing Time for Canada."

One of the high points of the meeting was the Edgar Marburg lecture presented by J. J. Mattiello, vice-president of the Hilo Varnish Corp., on the subject, "Protective Organic Coatings as Engineering Materials." He pointed out that the term organic coating in its present meaning includes such materials as varnishes, paints, enamels, lacquers, clear and pigmented textile coatings, plastics and similar special coating materials.

Eight symposiums were scheduled covering bearings, fatigue spectroscopic light sources, oil procurement practices, testing of parts and assemblies, P & H measurement, atmospheric weathering of corrosion-resistant steel and freezing and thawing tests of concrete. Part of the symposiums involved dual sessions so that each was an extensive item in itself. Added to these sessions were a number of others with selected technical papers, and at least three of the discussions were concerned with reports of technical committees.

For a paper of outstanding merit on research in engineering materials, H. R. Copson, research chemist was awarded the Charles B. Dudley Medal. The Richard L. Templin Award for a paper on new testing methods, established in 1945 was made to R. C. Brumfield, U. S. Naval Ordnance Test Station, Pasadena, Calif. For an outstanding paper on concrete, the Sanford E. Thompson Award was made to C. W. Muhlenbruch, associate professor of civil engineering, Carnegie Institute of Technology.

Reports on cement, concrete

In the technical session on cement and concrete, F. O. Anderegg of the John B. Pierce Foundation described a combination of Portland Cement, asphalt and ag-

(*Continued on page* 8)

Trained men needed for municipal services

Only highly trained personnel will solve the problem of more and better municipal services, with lessening funds with which United States and Canadian cities will have to cope in the near future, Clarence E. Ridley, executive director of the International City Managers' Association told members of the organization at its convention in Montreal, Que., June 17.

V. R. Smitham, manager of Dallas, Tex., was elected president to replace J. R. French.

Other officers for the year are: first vice-president, D. C. McMillan, Alameda, Cal., second vice-president, George J. Roark, Pensacola, Fla., third vice-president, Rodney L. Loomis, West Hartford, Conn. Members of the executive board for 1946-47 are Mr. French, Roy S. Braden, Charles A. Carran, L. P. Cookingham, Frank C. Hanrahan, E. L. Mosley and H. L. Woolhiser.

Bureau of Yards and Docks gets construction fund

An appropriation of $35,966,300 for construction by the Bureau of Yards and Docks inside the United States, and $60,052,000 for work outside the country is provided in the appropriation bill for the Navy for the next fiscal year as passed by the Senate last week. When the House passed the measure it approved $83,000,000 for work on the mainland, but the Senate cut this amount by more than half. A compromise somewheres between the two figures is expected.

Both the House and Senate have authorized an appropriation of $132,260,000 for maintenance and repair at naval establishments. Some construction will be done with this fund.

Most of the appropriations decided upon for new construction will be spent with approval of the Secretary of the Navy, the money not being earmarked for specific projects.

ASTM names new officers at Buffalo, N. Y., meeting

(Continued from page 7)

gregate that could be used in laying a floor that resists indentation much better than an asphalt floor, while markedly reducing the "spine-jarring" impact of the straight cement-concrete floor. The mix developed results in a system in which the particles of asphalt are dispersed in the concrete in the same state of subdivision as in the emulsion added. A mixture that has seemed to give excellent results required about 3½ bags of cement and 7 gal. of asphalt emulsion per cubic yard of concrete, the ratio of sand to stone being determined by the necessity of maintaining workability.

In another paper, "The Influence of Gypsum on the Hydration and Properties of Portland Cement Pastes," presented at this session, William Lerch, research chemist, Research Laboratory of the Portland Cement Assn., pointed out that for many cements the strengths can be increased and the contraction on drying decreased by the use of larger additions of gypsum.

John W. McBurney, M. Arnold Copeland and Russel C. Brink, of the National Bureau of Standards, presented a paper on "Premeability of Brick-Mortar Assemblages," describing tests made at 35 days and again after 1 year's and 2½ years' exposure. It was found that the initial rate of absorption of the bricks had the most effect on permeability.

A symposium was devoted to presentation and discussing of a paper on "Considerations Involved in the Making of Freezing-and-Thawing Tests on Concrete", by M. O. Withey, professor of mechanics, University of Wisconsin. The paper emphasized the importance of a knowledge of the weathering resistance of concrete and stressed the importance of accelerating the rate of disintegration without modification in the process of disintegration.

E. R. Parker, H. E. Davis and A. E. Flanigan, of the University of California, in a paper on "A study of the Tensile Test," described experiments made to determine the nature of fracture in mild-steel cylindrical tensile bars over a considerable range of temperature. Specimens tested at room temperatures failed entirely by shear, while specimens tested at liquid-air temperature failed by cleavage. At intermediate temperatures, a mixture of both types of fractures occurred in the cross section. An approximate analysis was made of the state of stress at the necked section of a tensile bar at the point of failure to account for the observation that shear-type fractures originated in the central portion of the bar when tested at normal temperatures.

Educators see engineer supply "deficit" until year 1953; change name of SPEE

Society for Promotion of Engineering Education becomes American Society for Engineering Education at St. Louis meeting

A cumulative "deficit" in the supply of engineers that will increase to a peak in 1949 and will not be met until 1953 was forecast by the Society for the Promotion of Engineering Education, at the organization's 54th annual convention at St. Louis June 20-23. The forecast was a summary of a report by the committee on outlook in demand for and supply of engineering graduates.

At the same meeting—the first held in three years—the organization amended its constitution to adopt a new name—the American Society for Engineering Education—and expanded its organization to include the Engineering College Research Association. The ECRA will act this summer to amend its own constitution to complete the union. Thus enlarged, the new ASEE will have 172 institutional members in addition to its 4,026 individual members.

General sessions of the four day meeting discussed trends of critical interest to engineers and engineering educators. In political and social fields, speakers warned that engineers have a responsibility to furnish "humane, scientific" understanding and constructive action necessary to attainment of "an orderly world society." Educators were called upon to prepare their students during college years for later effective participation in solution of political, social and economic problems.

Liberalized training for engineers

In an address of welcome, Arthur H. Compton, chancellor of Washington University, which was host to the convention, stressed the fact that the engineer is at the center of a cooperative movement toward a world society. As science and technology advance, he said, they become more specialized, and cooperation in the community becomes more necessary. "Because our society is strong today through dependence on one another, strife and antagonisms are more dangerous," he declared. In his words, technical education is not enough; engineers must have broad understanding of people.

On the same theme, Harry S. Rogers, retiring president of S.P.E.E. and president of the Polytechnic Institute of Brooklyn, said in his presidential address, "There is a growing conviction that engineers should have a better understanding of human relations generally and of the impact of technology on society."

Examining liberal arts subjects as a possible source of this understanding, he went on to say, "The Harvard Report on General Education in a Free Society frankly acknowledges that liberal education is a broad program of diversified specialties, little better designed for responsible citizenship than programs of engineering education. The report should give pause to those who believe that an extension of engineering education by the addition of standard courses from the departments of liberal arts will make significant contributions to the engineer's preparation for sustaining our social, cultural and political institutions, or for exercising any significant leadershp in them. . . . Engineering educators can and must play a part in the development of a more rational program, but they can do so only by associating themselves with historians, economists and philosophers."

Set hearing on plan for second Bay bridge

Announcement that a public hearing is to be held soon on feasibility of construction of a second San Francisco Bay bridge crossing came last week from Brig. Gen. Garrison H. Davidson, engineer for the Sixth Army. Set for August 12 in San Francisco, the hearing will be before a board made up of Army and Navy representatives, who will report their findings to the Secretaries of War and Navy for presentation to Congress later.

Specific location for the proposed bridge to be studied is from Hunters Point, south of the present San Francisco-Oakland Bay bridge, via Bay Farm Island to Alameda, lying south of Oakland. It was expected that the Oakland faction would put in a strong bid at the hearing for such a structure, as they are hotly opposing an ambitious dam-freshwater lake-causeway plan for the entire bay (*ENR* April 18, 1946, vol. p. 532) that they claim would cut Oakland and adjacent industrial areas off from its shipping revenues and extend rail lines into San Francisco. However, growing traffic congestion over the two existing structures requires that some type of crossing be evolved within the immediate future, even though a lively controversy is likely to ensue over its exact nature.

A summary of the committee report on demand for engineers was presented by Karl T. Compton, president of the Massachusetts Institute of Technology, committee chairman.

The report estimates that a cumulative deficit in the supply of engineers will increase to a peak in 1949 and will fall off to 1953, when the number of engineering graduates will catch up with the demand. Estimated cumulative deficits for seven years are: 1946, 25,500, 1947, 35,300; 1948, 37,300; 1949, 37,900; 1950, 23,400; 1951, 16,400; 1952, 6,000; 1953, 4,400 surplus. The figures will need frequent revision, and the committee recommended that a new committee be appointed to report revised figures to the group each year.

Estimates are derived in all cases from the most conservative figures which the committee could obtain. An opinion poll was made of personnel men in industry, and 300 questionnaires were sent to representative industrial companies. From the replies of 125 selected companies of graded size, tables were compiled to indicate the expected demand, as explained by R. M. Kimball, assistant to the president, M.I.T.

These companies in 1938 employed 16,377 engineers and in 1946, 25,556 engineers, an increase of 56 percent. In 1947 and each succeeding year they expect to need 4,352 new engineers, of whom 397 are civil engineers. For all engineers the annual need is more than 120 percent above 1938; for civil engineers it is more than 160 percent higher than 1938. The largest increase in demand for civil engineers is in the research and development work.

Anticipated total demand for engineers, according to the committee, is 23,000 each year for the next four years. The committee assumes that the demand then will go down to 20,000 per year.

There is an increasing demand for engineers with advanced degrees. In this respect, civil engineers rank fourth among six branches of engineering considered in the report.

"Production" of Graduates

Production of engineering graduates could be estimated by the committee with more certainty, on the basis of figures furnished by the engineering schools. The number of graduates available for various years is estimated as follows: 1946, 5,500; 1947, 13,000; 1948, 20,000; 1950, 45,500.

Distribution of undergraduate engineering students, as reported by the committee, revealed figures of interest to civil engineers. The percentage of civil engineering students among the total number of engineering students for various years is as follows: April 1946, 10.9 percent of 85,000; 1940-41, 11.1 percent of 100,657; 1935-36, 13.8 percent of 60,395; 1930-31, 15.8 percent of 73,386; 1925-26, 22.4 percent of 54,337; 1920-21, 17.1 percent of 51,908; 1910-11, 26 percent of 30,337.

ASCE aid sought

A plea for increased participation by the American Society of Civil Engineers in unifying the educational essentials of the civil engineering field was made before the Civil Engineering Division in a report of the cooperative committee on civil engineering education, presented by S. T. Carpenter, chairman, head of the civil engineering department, Swarthmore College. The report visualizes recognition by the ASCE of its full responsibilities for professional training. Appointment of a full-time ASCE staff man is suggested to coordinate the society's efforts to promote the young civil engineer's professional growth.

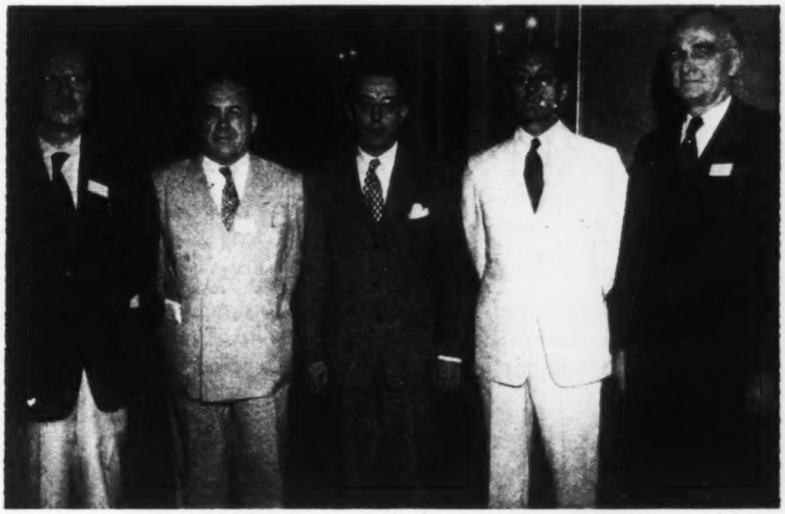
The report regards engineering school years as the base of an education which continues throughout the professional life of the engineer. Training should emphasize fundamentals, with only preliminary introduction to specialties, which can be better learned in practice. Teaching by men with practical experience is essential, and employment in professional work for teachers should be required during vacations to keep them abreast of developments.

In a transportation conference, Harry Rubey, committee chairman, head of the civil engineering department at the University of Missouri, outlined favorable results already obtained from the report mailed six months ago to presidents, chief engineers and personnel directors of all railroad and airway companies and to chief engineers and chief commissioners of all high way departments. The report aimed to clear away the personnel relations bottleneck which has deterred recruitment of engineer graduates by railroads and highway departments for many years. The work will continue.

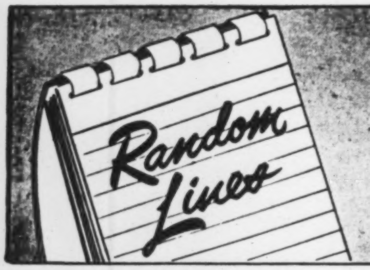
At a conference on applied hydraulics, L. D. Doty, head of the department of hydraulic engineering Cornell University, emphasized the need for hydrology as a required course in the civil engineering curriculum.

In a meeting on surveying and mapping, W. H. Brady, lecturer on mechanical engineering at the University of California, demonstrated effective use of sound-track film to speed teaching of surveying, and A. J. McNair, instructor in engineering drawing, University of Colorado, displayed the results of new developments in map production. D. H. Harkness, W. & L. E. Gurley Co., showed slides that illustrated the construction and use of a compact, accurate, lightweight theodolite built for the Army Engineers.

W. S. Evans, professor of civil engineering at the University of Maine, was elected chairman of the civil engineering division for the ensuing year.



***New name, new officers**—New officers of the newly-named American Society for Engineering Education pose at St. Louis convention. Left to right: F. M. Dawson, State University of Iowa, vice-president; E. B. Norris, Virginia Polytechnic Institute, vice-president; H. O. Croft, State University of Iowa, president; C. J. Fruend, University of Detroit, vice-president, and J. S. Thompson, president, McGraw-Hill Book Co., treasurer. J. R. Killian, of M.I.T. also named a vice-president, was not present when photo was taken.*



FROM AN EDITOR'S NOTEBOOK

Highway administrators seek solution of problems posed by contractor's reluctance to bid on bridge construction—Arizona water shortage discussed

The reluctance of contractors to bid on bridge work may be understandable under present conditions, but it certainly poses a problem for highway administrators. They appear to be faced with the alternative of stopping highway work or asking the public to pay prices for their highways that seem to be without justification.

Discussion of this problem with western road builders at their recent meeting in Salt Lake City brought out the following:

The unwillingness of contractors to assume risks in face of uncertainties has resulted in the receipt of no bids on some jobs and only one on many jobs. As a result, recent experience in Oregon has been that about one-half of the bridge jobs advertised do not result in contracts.

A recent California bridge job, characterized as being "a desirable job," drew no bids. On other California projects there was only one bid each and these were relatively high, making it difficult for highway engineers to decide whether the lone bids were representative. One particular "one-bid job" listed bridge pier concrete at $60 per cubic yard. This bridge is located close to a good source of aggregate, the state is supplying cement, and the bid does not include the cost of reinforcing steel or its placing. The $60 figure compares with a prewar figure of some $16 to $20. The result of such bids is that California officials have about decided to indefinitely delay calling for bids on bridge jobs to see if the situation will clear up to any extent.

Arizona engineers had a similar experience with the price of concrete. The same bridge design has been used in three different locations at three different times. Low bidder in each case happened to be the same contractor. In 1939 the bid was $18 a cubic yard for concrete, in 1940, $22, and in 1946, $37.

Arizona has recently let contracts for steel bridges. However, officials do not expect these steel bridges to be under construction until 1947, due to delivery schedules on structural steel.

In many cases the type of bridge built depends on the materials available. This was, of course, true during the war, but it is just as true now. In Utah a bridge was proposed early in the war. The design was found unsuitable because of material shortages and the bridge was redesigned using other materials. By the time three such changes had been made, the war was over and now a fourth change is being made to suit it to the postwar materials situation.

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Water shortage—Arizona's biggest problem

The men with whom I talked on the Arizona water shortage, as reported in detail in *ENR* April 18, 1946 vol. p. 529, indicated that, while a shortage definitely exists, it is not as serious as some had feared. The water shortage has been caused by two things: (1) the overdevelopment of the water resources in the central Arizona area and (2) a low water cycle of some 8 years duration. R. V. Leeson, chief engineer, Maricopa County Municipal Water District No. 1, who has worked on Arizona water problems for the last 40 years, pointed out that this low cycle was similar to one which occurred in the early 1900's and lasted some 20 years. According to Harry J. Lawson, chief engineer, Salt River Valley Water Users Assn., his organization has available for its membership 3 acre-ft. of water per acre this year as compared with 3.5 in 1945. This suggests that agriculture in the central Arizona area will not be hit too hard this year. However, if the drought continues for another year, the effect may be much more serious.

SEATTLE'S LAWNS ARE GREEN

The extent to which Seattle, Wash., home owners sprinkle their lawns is reflected in that city's water consumption records. A chart recording daily total consumption, hour by hour, shows that the past year's peak demand came in August in the hours between 6 and 9 p. m. The highest peak for 1945 was reached on August 27. On that day, figuring consumers at roughly 600,000, the consumption was 270 gal. per capita. The average for the month of August was 226 gal. per capita per day and the 12-month average is about 120 gal.

Ground water supplies in the Gila and Salt River basins represent a more difficult situation, since more water is being used than is supplied. R. A. Hill, of the firm of Leeds, Hill, & Jewett, of Los Angeles, points out that in the Salt River Valley the *average* annual deficit is 400,000 acre-ft. J. B. Girand, Sr., consulting engineer, Phoenix, emphasized that the Gila River valley in particular is overdeveloped and that the only solution to the Salt and Gila River basin groundwater problem is to import water into central Arizona from the Colorado River.

Routes for supplying Colorado River water to central Arizona are still under study, according to Phoenix officials of the Bureau of Reclamation who also pointed out that the Marble Canyon Route (see page 6 of this issue) has been discarded from further consideration by the bureau and that the Bridge Canyon route is favored by Arizona interests because part of the cost will be allocated to power.

One of the current uncertainties relates to how much water central Arizona is entitled to under the Colorado River Compact. Current Arizona opinion sets the figure at about 1,200,000 acre-ft. per year.

Arizona interests are trying to get a revision of the reclamation law through Congress which would give more time (80 years instead of 40) to pay off reclamation projects and provide a lower rate of interest (2 instead of 3 percent). The effect of such a law would be to make the Bridge Canyon routes and the Parker route appear economically feasible, whereas at the present time feasibility is questionable.

The power shortage in Arizona appears to be more serious than the water shortage as emergency measures have been taken to amplify the existing supply. Power deficit, confined almost entirely to publicly owned system, will be made up by 100,000,000 kw.-hr. of off-peak steam generation by Southern California Edison Co. and the Los Angeles Department of Water and Power, delivered over the Bureau of Reclamation's lines from Parker Dam to Phoenix. The Salt River Valley Water Users' Assn. has rented a 12,000-kva. mobile steam power plant from the Navy to power irrigation pumps.—*L.L.W.*

Bureau lets contract for 2-mile rock tunnel

A tunnel nearly two miles long and of 23-ft. dia. drilled through solid rock will be built under contract authorizations aggregating more than $5,000,000 announced June 27 by Secretary of the Interior J. A. Krug. The tunnel will be part of the irrigation system for the million-acre Columbia Basin project being developed by the Bureau of Reclamation in south-central Washington. It will carry water stored by Grand Coulee Dam to transform an area now largely barren into from 12,000 to 15,000 irrigated farms.

The bureau is pushing ahead with work on the irrigation system as rapidly as possible, Commissioner of Reclamation Michael W. Straus declared, with a view to having construction sufficiently advanced to provide irrigation for the first 400,000 acres by 1950-51. The initial tract of 7,000 acres in the Pasco area will be irrigated in 1947.

The two contracts authorized for award totaled $5,042,480 and covers construction of the tunnel, five and one-half miles of the main irrigation canal on the project, a siphon 1,020 ft. long, and other work.

The largest of the two contracts approved went to T. E. Connolly, Inc., a San Francisco construction firm, on its bid of $3,494,420 to construct the tunnel and siphon and a 1,000-ft. section of the main canal. The second contract, to J. A. Terteling & Sons, Inc., of Boise, Idaho, on a bid of $1,548,060, provides for construction of 5.4 miles of the canal. This waterway will be the largest irrigation canal ever built in the Pacific Northwest. It will carry a volume of water larger than many rivers. Sections to be built under the new contracts will vary in width from 95 to 200 ft. at the top of embankments and will be from 20 to 48 ft. deep.

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New airlines bus depot planned for N. Y. City

An airlines terminal for buses serving all airlines using La Guardia Field and Idlewild Airport will be built on the block west of First Avenue between Thirty-seventh and Thirty-eighth streets, adjacent to the Queens Midtown Tunnel, it was announced June 18 in New York City.

The terminal will keep buses serving the airports from entering the congested Grand Central area where the present Airlines Terminal Building is now located. The present depot, at Forty-second Street and Park Avenue, will be retained as a ticket bureau and for executive offices for airlines companies.

U. of Illinois to lease pier as branch

Negotiations are virtually complete by which the University of Illinois will lease 253,000 sq. ft. of space at the Navy Pier in Chicago for establishment of a Chicago branch of the university, according to Park Livingston, president of the university's board of trustees.

The university will pay the city a yearly rental of 35c. per sq. ft. or $88,550, for the space under a lease renewable yearly for the next four years.

The U. S. Navy, which has occupied the pier as an educational and training center since shortly before the war, is at present vacating the premises and classes are expected to start with the fall term beginning in September.

The greater portion of the space to be leased by the university, to be used for class room instruction, is located on the first floor on the north side of the pier. The remainder of the leased area, to contain administrative offices, a library and laboratory facilities, are to be located elsewhere on the pier.

Class room and laboratory facilities are expected to be made available for some 4,000 students at the pier by September. However, no living accommodations will be provided on the pier either for the students or for the faculty, estimated to total between 200 and 275 professors and instructors.

Under the present plan, the Chicago branch of the university will offer freshman and sophomore courses in engineering, liberal arts, business administration and pre-professional training. No director for the new school has been appointed to date.

Decision to establish a branch of the university on the Navy pier was based on two factors, said Mr. Livingston. One was that a minimum of time and expense is needed to convert the class rooms and other training facilities installed by the Navy, into suitable accommodations for the new school. The other is the large enrollment expected for the fall term.

Pre-registrations and advance inquiries indicate requests for enrollment in the university this fall may exceed 21,000, said Mr. Livingston, while the maximum number that can be accommodated at the Urbana, Ill. campus is 15,000.

HERE'S A CHANCE TO GO TO CALIFORNIA

With a $123,000,000 state highway construction program on its hands, the Division of Highways of the California Department of Public Works is urgently in need of from 300 to 500 young road engineers.

State Highway Engineer George T. McCoy is advertising for graduate civil engineers to enter state service. During the war more than 300 engineers of the division of highways entered the armed services. Many of these have returned, but the expanding postwar highway building program requires additional engineers in all of the eleven highway districts.

Positions available, McCoy said, range from junior engineers to associate highway engineers. Starting salaries vary from $230 a month to $355.

District highway engineers have launched $46,728,300 worth of postwar projects set up in the initial part of the California Highway Commission 3-year program. The second part of the program will be started this month. In the eleven highway districts there is a serious shortage of engineering personnel.

◆

U. S. Engineers to build power plant at the Soo

Plans and specifications have been completed and bids will be taken soon by the U. S. Army Engineers for a new hydroelectric power plant to be constructed at the St. Marys Falls canal at Sault Ste. Marie, Mich. Funds amounting to $3,250,000 have been appropriated for the new plant, which will replace the present power plant constructed in 1902.

The new installation will have a capacity of 14,000 kw. or about three times the capacity of the existing plant. Current will be supplied to the Sault Ste. Marie area, to Manistique and St. Ignace. Mich., as well as intervening communities.

Congress has authorized the present construction as the first stage of an ultimate power development program at the Soo which will provide a plant capacity for an output of about 45,000 kw. Construction of the new plant will be under the jurisdiction of Col. Albert Riani, district engineer, Detroit District, U. S. Army Engineers.

◆

Correction

The advertisement of the government surplus floating power plant "Resistance" on page 208 of the June 27 issue gives the alternate capacity of the turbo-generators as 25,000 kw. at 25 cycles. This is an error. It should be 25,000 kw. at 50 cycles.

Men and Jobs

William R. Bandy has been assigned engineer in charge of the surveys of 18 parties which will re-establish section and quarter-section corners of the original General Land Office surveys on portions of the area contained in the Missouri River basin development project.

S. H. Bothwell, city manager of Ft. Worth, Tex., has resigned after serving for nearly 7 years. **W. O. Jones,** director of public works, was made acting city manager and **C. M. Thelin,** city engineer, was made director of public works.

Malcolm D. Stewart, Toronto, has been appointed city engineer of Sudbury, Ont.

L. P. Zimmerman has been appointed to a 2-year term as Hennepin County, Minn., engineer, replacing **W. E. Duckett** who held the position for 18 years.

W. B. McMullen has been appointed chief engineer and road superintendent of Renfrew County, Ont., with headquarters at Pembroke. He was formerly city engineer of Sudbury.

J. G. Lund, Traill County engineer, Hillsboro, S. D., for the last 10 years, has resigned to go with J. A. Jardine Bridge Co., Fargo, N. D.

Galen Fiddick, formerly of Osage, Iowa, has been appointed resident engineer for the state highway department with headquarters at Decorah, a position formerly held by Clarence Moore, deceased. Post was vacant during the war.

Ralph Smyre, city manager of Hickory, N. C., for the last seven years, is retiring to be associated with a local construction firm as secretary-treasurer.

William Anderson, has been appointed water works engineer of Walkerton, Ont.

William B. Mather, formerly principal geologist for the Missouri Geological Survey at Rolla, has been appointed to the inorganic section of the Midwest Research Institute.

Henry M. Pierce, Aberdeen, S. D., city engineer, will serve as first city manager, continuing as city engineer.

Victor A. Johnson, Minot, N. D., engineer of the Minot division of the state highway department, has resigned and joined the S. O. Sorkness Construction Co. of Jamestown.

Vail H. Moore, W. F. Tueting, Jr., and **Chung-yuan Li,** engineers, have recently joined Warren & Van Praag, Inc., consulting engineers, Decatur, Ill. Mr. Moore was formerly an instructor in sanitary engineering, surveying and physics, at the University of Illinois. Mr. Tueting was an officer of the Navy's CEC and designed water supply and sewer systems for the two largest permanent naval air bases in the Aleutians. Mr. Chung-yuan Li is a B. S. in civil engineering from Chiaotung University and M. S. in sanitary engineering, Cornell.

J. P. Carriere has been appointed manager of Hull, Que., effective when the legislature approves the change of administration. Mr. Carriere has spent all of his engineering career with the Department of Public Works of Canada except for the war years.

The Perliter and Soring engineering firm has recently organized consulting offices in Los Angeles, Calif. Firm members include **Simon Perliter,** civil engineer, who spent the last five years as chief design engineer in the U. S. Department of the Honolulu district, and as technical engineering consultant in the Pacific ocean area. **Arthur R. Soring,** mechanical engineer, was a design engineer with the U. S. Engineer Department for 8 years, and subsequently was stationed for 5 years in the Honolulu district.

At Williston, N. D., **Paul Hays** has been appointed city engineer and **Willard Webster** assistant engineer.

The Bremerton Wash., City Council has approved appointment of **Richard F. Date,** Poulsbo, as assistant city engineer.

Warland Cutler has resigned as office engineer at Yakima district headquarters of the Washington State Highway Department.

Paul L. Holland, chief engineer of the Maryland Public Service Commission, has been employed by the Virginia State Highway Department to make an independent appraisal of the properties of the Chesapeake Ferry Corp. in connection with the state's proposed acquisition of the corporation's ferries across Hampton Roads.

Oscar G. Hiveley, Stephenson County

Visiting a tannery as a part of a study of industrial wastes reaching the Potomac River are (left) Ralph E. Fuhrman, superintendent of the Washington, D. C. treatment plant; and Harold A. Kemp, director of sanitary engineering for the district.

Edwin A. Schmidt (left) head engineer at Washington, D. C., for the Army Engineers district office there, discusses water quality standards with Edward Cotton, engineer secretary for the Interstate Commission on the Potomac River Basin.

G. Russell Hartley (center) Englewood, N. J., city engineer, was host at a recent meeting of the New York-New Jersey metropolitan chapter, American Public Works Association. With him here are: (left) F. M. Galloway, superintendent of public works, Montclair, N. J., new president; and Allan H. Rogers, director of Public Works, Garden City, N. Y.

superintendent of highways, Freeport, Ill., has now assumed the additional position of acting county highway superintendent for **JoDaviess County, Galena,** Ill., a post vacant since George E. Schroeder resigned in March, 1946.

S. Carl Smithwick, district engineer at Spokane, Wash., for the Portland Cement Association, has resigned after 15 years. He will be succeeded by **R. P. Newland,** until recently district engineer of the Washington State Highway Department, and Smithwick's assistant for the last two months.

Harry S. T. Carmichael, Jr., of Bowling Green, Ky., first assistant chief engineer in the state highway department, is leaving to take an executive position with a contracting firm engaged in Army construction work in the Philippines.

George Leonard Freeman of Moran, Proctor, Freeman and Mueser of New York City, received the honorary degree of Doctor of Engineering from the University of Maine at the recent commencement.

Col. Peter A. Feringa, director of civil works, Office of the Chief of Engineers, U. S. Army, on June 18 received the Legion of Merit and the Bronze Star Medal for meritorious service in the European service, for his work as district engineer at Savannah, Ga., and as resident member of the Board of Engineers for Rivers and Harbors.

William Green, formerly an engineer at Benicia arsenal, has taken over the job of city engineer of Redding, Calif. He succeeds **Henry A. Ross,** who resigned to become assistant city engineer in El Centro. Green is a graduate of Massachusetts Institute of Technology.

Clayton N. Ward and **John A. Straud** have formed a consulting engineering firm in Madison, Wis., to specialize in water and sewage works, flood control, irrigation, drainage, hydraulic research and hydrological investigations. Mr. Ward taught for two years at the University of Michigan and ten years at the University of Wisconsin. Mr. Straud, a 1932 graduate of the engineering school of the University of Wisconsin, was with the State Conservation Service, and the Wisconsin Highway Commission.

Richard Worthington, resident engineer at Halifax, Va., will relieve **H. W. Runkle** as resident engineer in Martinsville, and Mr. Runkle will take Mr. Worthington's place at Halifax.

Back to Civilian Activity

George Smith, of Independence, Iowa, formerly with the Seabees in the Pacific, is assistant county engineer at Grundy Center.

Norman W. Haner, colonel, who was district engineer for Army and Navy construction in Dutch Guiana, Brazil, Uruguay and Paraguay, will head a new structural engineering department for R. H. Corey, Portland Ore., consulting engineer.

Benjamin Zelonky, lieut. commander, USNR, who did engineering and dredging work at Pearl Harbor, plans to resume his own contracting business.

E. T. Levitt, lieut. commander, (CEC)-USNR, recently joined Lanning-Harris, Inc., general contractors of White Plains, N. Y. as construction engineer and superintendent.

Arnold H. Vanderhoof, lieut. commander, USNR, has reopened offices as a consulting engineer at Asheville, N. C. He had charge of the hydrographic office at Savannah, Ga., for two years and then was transferred to Charleston, N. C.

Richard M. Baxter, lieut. commander, and **Warren Woodman,** lieutenant, have formed the consulting engineer firm of Baxter & Woodman, at Crystal Lake, Ill.

Wayne Bryan, lieutenant, USNR, has been released by the Navy and is now city engineer at Neenah, Wis.

Eugene C. Bauer, Jr., major in the Chicago Ordnance District, U. S. Army, has returned to the Kensington Steel Co., Chicago, with the sales division.

M. T. Whitmore, lieutenant colonel, who was construction quartermaster in charge of the construction at Camp Stewart, Hinesville, Ga., opened an engineering office at Atlanta, Ga.

Guy Montpetit, lieut. colonel, has retired from the Canadian Army and is resuming as a consulting engineer in Montreal.

R. Eric Friden, following his discharge from the Navy, has become a member of the staff of Barnes and Reinecke, industrial designers and engineers, Chicago, Ill.

Melvin J. Noth, captain, discharged from the Army, where he was head of the water supply section during the occupation of Korea, has joined the firm of Frank J. Davy & Sons, consulting engineers of LaCrosse, Wis.

Victor W. Buhr, captain, CEC, USNR, after service in the Normandy invasion and the Okinawa campaign, has formed, with **Albert Basile,** the Victor W. Buhr Associates, engineers at Salisbury, Md. Mr. Buhr was formerly with the White Construction Co.

Walter P. Warendorff, formerly lieut. commander in the Navy and also in the Army's Corps of Engineers, has been named chief of the technical section of the New York State Veterans Administration—to be in charge of the architechtural and engineering design work for veterans hospitals and facilities in the State of New York and in Puerto Rico.

Matt Walker, captain, former assistant Tarrant County engineer, Ft. Worth, Tex., is on terminal leave from the Army Corps of Engineers and will return to his old job in the Tarrant county office.

Somewhat parallel engineering careers have been followed by Spencer V. Courtelyou, who is now district engineer for the California Division of Highways at Los Angeles (left) and his brother, Herman P. Courtelyou, who is engineer-director of maintenance and sanitation, Los Angeles Department of Public Works. Both men have advanced to their present posts of responsibility after long careers within their departments.

ENGINEERING SCHOOL NEWS

New deans at Harvard Graduate School of Engineering and M.I.T.—Hydraulics Lab at Georgia Tech—New president at Calif. Tech.

Gordon Maskew Fair, professor of sanitary engineering, Harvard Graduate School of Engineering, Harvard University, **has been appointed dean, succeeding Prof. Malcolm Westergaard, who is retiring, but who will continue as Gordon McKay professor of civil engineering.**

Dean Fair was born in Berghersdorp, Union of South Africa, educated at Werner-Siemens Gymnasium, Berlin, Germany, Charlottenburg Technical College, University of Berlin, and Massachusetts Institute of Technology, receiving his B.S. degree from the latter and also from Harvard, in 1916. He joined the Harvard engineering school faculty in 1918, was assistant director of sanitation for the League of Red Cross Societies in Geneva, 1921, and has been active in water supply and sewage disposal projects as well as in the conduct of local and national engineering societies.

Bachrach photo

In 1945 Dean Fair was elected to a directorship on the board of the international division of the Rockefeller Foundation, the first sanitary engineer to receive such a distinction. At present he is in Brazil, making observations on public health developments for the foundation.

Since 1943 he has been a consultant to the Institute of Inter-American Affairs, and he played a major role in the initial organization and staffing of cooperative health and sanitation activities in 18 Latin American countries.

Thomas K. Sherwood, professor of chemical engineering and acting dean of engineering, has been appointed dean of the school of engineering, Massachusetts Institute of Technology, succeeding Dean Edward L. Moreland. Dean Sherwood is a native of Columbus, Ohio, a graduate of McGill University 1923, and received his doctor's degree at M.I.T. in 1929. He was assistant professor of chemical engineering at Worcester Polytechnic Institute from 1928 to 1930, and returning to M.I.T. in 1930, was appointed professor, 1941.

During the last year M.I.T. has received $2,456,963 in gifts—more than in any other year in the last twenty.

Lieut. Col. T. H. Evans, head of the civil engineering department, Georgia School of Technology, is planning the installation of approximately $35,000 of equipment in the new hydraulic laboratory. This is the initial outlay, with further expansion planned. The new facilities will be for graduate and undergraduate research work. With the new laboratory, it is planned to incorporate the best of modern hydraulic practices. Prof. Carl E. Kindsvater, formerly with USED in the hydraulic department in the district office in Little Rock, Ark., will be in charge.

Colonel Evans received his bachelor's and master's degrees at California Institute of Technology. He served with the Corps of Engineers as assistant director of the Officers Candidate School at Fort Belvoir and later was assigned to the training division of the Army Service Forces in Washington. Before the war he was professor of civil engineering at the University of Virginia, and prior to that taught at the Sheffield Scientific School at Yale University.

Lee A. DuBridge has been appointed president of the California Institute of Technology, effective in September. Dr. DuBridge has been director of the radiation laboratory at the Massachusetts Institute of Technology that was set up to develop radar for military purposes, there he supervised the work of 3900 persons and handled a budget of some $4,000,000 per month.

G. W. Housner has been appointed assistant professor of applied mechanics at the same school. He was graduated in civil engineering at the University of Michigan in 1933. During the war he was with the 15th Air Force in England, Africa and Italy, as chief analyst of the First Operational Analysis Section. Formerly he was with the district engineer's office in Los Angeles in structural analysis.

A. P. Banta has been named associate professor of sanitary engineering on a full-time basis, following his recent return from the Pacific area where he has been a lieutenant-colonel in the Engineers Corps. A graduate in civil engineering at Stanford University in 1926, and an M.S. graduate of the institute in 1928, Mr. Banta was successively assistant engineer of the Los Angeles County sanitation district and part time assistant professor of sanitary engineering at the institute until he was called to active duty in 1941. He served in the district engineer office at Mobile, Ala., and was in charge of water supply and sewerage installations in various Army camps of several southeastern states during the entire period of the late war.

Prof. Charles B. Breed, head of the department of civil and sanitary engineering, Massachusetts Institute of Technology, is retiring after 48 years service. He was graduated from M.I.T. in 1897. Joining the faculty in that year, he became assistant professor of civil engineering in 1907, and professor of railway and highway engineering in 1924. A specialist in railway grade crossing elimination, he acted as consultant on many projects estimated to cost over $30,000,000. He was joint author with George L. Hosmer of "Principles and Practice of Surveying", and served as an associate editor of the American Civil Engineers Handbook.

Edna G. Russell, daughter of a Winnipeg, Man., contractor, has received from the University of Manitoba a master's degree in civil engineering. Two years ago she was graduated in architecture, receiving a master's degree in that subject.

F. M. Wood associate professor of civil engineering and applied mechanics at McGill University, Montreal, Que., is leaving to accept an appointment at Queen's University, Kingston, Ont.

Requesting a change of work, James H. Graham, dean of the engineering college of the University of Kentucky since 1935, has been named by the trustees as consultant for the university with industry and government.

The National Lime Association has established a fellowship at Rutgers University in the department of sewage and waste treatment. It is under the general direction of Willem Rudolfs with R. P. Logan directly in charge of the project. R. Y. LeVine, a graduate student, is carrying out the laboratory work. The program is concerned with the utilization of various lime products in the treatment of water wastes. An important phase is the study of lime in the treatment of pickling liquor such as is obtained from steel producing and fabricating centers. The sludge problem is of prime concern especially to small industries, and it is hoped that information will be developed regarding means of producing low sludge volume, high rates of dewatering of sludge, rapid settling, etc.

Test-welded 80-ft. trusses with 144 strain gages

To obtain data for the further development of welded H-section trusses of long span, The Austin Co. recently concluded a series of tests on a pair of 80 ft. standard trusses taken from the stock on hand at the Austin fabricating shop at Cleveland. H. D. Churchill, professor of mechanical engineering at Case School of Applied Science, directed the test, which were carried out by members of his staff. A total of 144 of the paper clip size wire strain gages were used in the tests.

Fabricated completely from rolled members, assembled with their webs in a single vertical plane, the Austin H-section trusses were originally designed in 1943 and tested to destruction in January, 1944, at the field testing laboratory adjacent to Austin's fabricating shops where the recent tests were also made. The 50-ft. trusses used in the initial test failed under a load which was 253 per cent of the design load, when an end vertical buckled. (*ENR* Jan. 25, 1945 vol. p. 122 and June 28, 1945 vol. p. 882).

Following supplementary tests at two independent laboratories, The Austin Co. adopted the H-section as a standard for use in welded trusses of 50, 60, 70 and 80 ft. lengths, and has already used the trusses in more than 30 plants from coast to coast.

In the recent tests, the wire strain gages of the SR-4 type were attached to the joints at both ends of the first diagonal and at certain other important points. They were placed at the same locations on both trusses to provide a check. The gages consists of a tiny loop of 0.001-in. copper-nickel wire, which are cemented to the steel surface of the member being tested. When the member is strained the diameter of the wire decreases, causing a change in the resistance. Multiplied by electronic equipment the change can be measured by conventional recording devices.

The strain measurements were recorded by three automatic switching units and three SR-4 strain recorders. Each pair of instruments, including a switching unit plus a recorder, made an automatic written record of the strains at 48 gage points, so that 144 individual strain readings could be recorded in about two minutes. More than three miles of wire was required to connect the gages to the instruments.

The test loads consisted of 60 ft. lengths of structural steel resting on purlins located directly above the vertical truss members. The first test was made under a load somewhat over the design load, after which the entire load was removed. In the second test, the following day, a 254,000 lb. load was applied, equivalent to a cement tile roof deck plus twice the 35 lb. per sq. ft. live load. Maximum deflection was about two inches.

The peak load was then reduced to 196,000 lb. and left on for three days. After removal of the total live load, both trusses showed a maximum residual deflection of one-sixteenth inch.

Approximately 3,000 strain readings were recorded at intervals during the loading and unloading in the tests, as well as under the peak loads.

All of the readings taken during the tests indicated that satisfactory truss action was taking place throughout both trusses at all times, officials said.

Building code revisions for District of Columbia

The building code of the District of Columbia has been revised to permit thinner walls on residential construction. On such construction, of buildings not over three stories high (walls not over 40 ft. high) and with flat roofs, the bearing and party walls are limited to 8 in. in thickness when not more than 30 ft. in height for solid walls of brick, and 20 ft. in height for hollow walls of brick and walls of hollow brick.

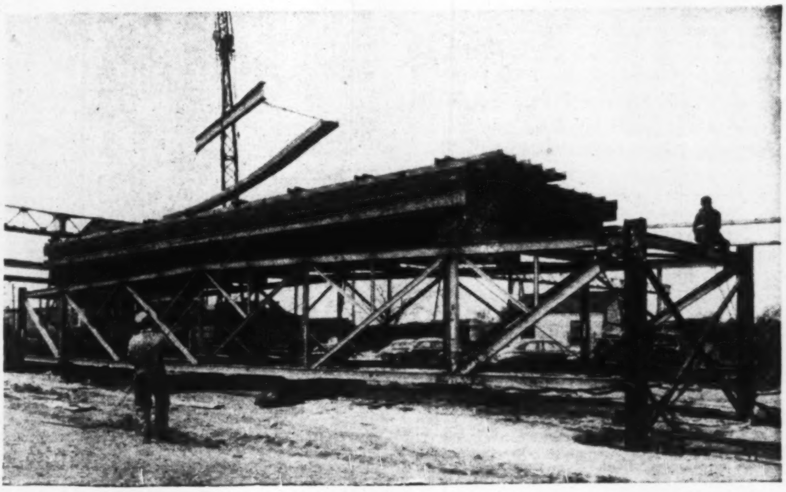
However, this construction will be permitted only when the unsupported height of such walls does not exceed 12 ft. and provided there is a distance of not over 50 ft. between cross walls, buttresses or returns, and provided further that no span framing into walls shall exceed 17 ft.

Other provisions include, for fire-resistance buildings of skeleton construction, exterior walls may consist of incombustible panels not less than 2 in. in thickness and having a fire-rating of not less than 2 hr. However, walls of such buildings, unless of masonry, must not be within 5 ft. of a party line.

Pittsburgh revises code

The building code of Pittsburgh, Pa., is undergoing revision by 11 subcommittees who are substituting a "performance" code for the present "specifications" code. The complete code, comprising changes requiring study as to legality and enactment by the state legislature, should be ready by 1947.

In structural steel, for example, design stress, formerly 18,000 lb. per sq. in. of tension, has been revised to 20,000 lb.



These 80-ft welded H-section trusses took a load of 254,000 pounds in recent tests conducted to determine the flow of stresses through truss joints of this type. When the peak load was removed, the trusses showed a maximum residual deflection of one-sixteenth inch. Load consisted of 60-ft. sections of structural steel.

H. D. Churchill (left) of the Case School of Applied Science, and A. T. Waidelich, assistant research director for the Austin Co., inspect some of the 144 strain gages used in the test.

OBITUARY

Ora Bundy, 63, died in Ogden, Utah, on June 12, after having been closely associated with Utah construction and irrigation circles for 27 years. He was the president of the National Reclamation Association.

Mr. Bundy was an engineering graduate of Purdue University and served as an officer in the Corps of Engineers during World War I. He supervised the construction of the Ogden arsenal in 1919, and later organized his own engineering and contracting firm. As president of the Ogden River Water Users' Association, he built numerous outstanding water installations in Utah, including the Pine View Dam. A former mayor of Ogden, he also was a candidate for the governorship of Utah in 1940.

Arthur T. Dougan, retired civil engineer, died in North Windsor, N. Y., June 16. Mr. Dougan assisted in the laying out of Stewart Field, the airport near West Point, N. Y., on which work he served as a civil engineer for the federal government.

Jacques P. Brillon, engineer of the Quebec Water Commission, died at Ontremont, Que., June 14. Recently discharged from the R.C.A.F., Mr. Brillon was a native of Montreal and a graduate in civil engineering of the Massachusetts Institute of Technology, 1933.

Clarence D. Conway, 57, Sacramento Valley engineer, died at Red Bluff, Calif., June 19.

Lewis K. Malvern, 76, who received his engineering degree at Cornell University in 1894, died at Winter Park, Fla., June 15. Throughout his career, until his retirement in 1940, he was employed by the Elgin Watch Co.

Thomas J. Hodges, 64, Schuylkill River project engineer with the Pennsylvania Department of Forests and Waters, died June 12 at Harrisburg, Pa. He took his civil engineering degree at Swarthmore College in 1906 and had practiced engineering in Santo Domingo and in various parts of this country before joining the Pennsylvania department in 1932.

Samuel J. Hanes, 84, builder in Springfield, Ill., for 60 years, died June 20. In 1898, Mr. Hanes planned and supervised the raising of the famous Sangamon County court house and the construction of a new first floor under the structure.

Authorize big contracts on Colo.-Big Thompson job

Secretary of the Interior J. A. Krug has announced the authorization of two contracts totaling almost $9,500,000 for constructing Horsetooth Reservoir on the Colorado-Big Thompson Reclamation project near Fort Collins, Colo. This reservoir, according to Commissioner Michael W. Straus of the Bureau of Reclamation, will be formed by the construction of four earth-filled dams and Satanka Dike. The reservoir will be about 6.5 miles long and from one-fourth to three-fourths of a mile wide, with high-water elevation at 5,430 ft., according to bureau engineers.

A $5,111,877 contract for building Horsetooth Dam, the Satanka Dike, and the Soldier Canyon Dam has been authorized for award to a group of contractors composed of: Grafe-Callahan Construction Co., the Gunther and Shirley Co., both Nebraska firms, and W. K. McIlyar of Dallas, Tex.

Under a contract for $4,319,427, the Hinman Brothers Construction Co., a Colorado corporation, and Rhoades Brothers and Shofner, a partnership of Los Angeles, jointly, will construct Dixon Canyon Dam and the Spring Canyon Dam.

When the Colorado-Big Thompson project is completed, it will divert surplus waters of the Colorado River from the western slope of the Rocky Mountains through the Alva B. Adams tunnel under the Continental Divide to more than 600,000 acres of water-deficient irrigated lands on the eastern slope. A series of power plants will provide hydroelectric power for irrigation pumping, rural electrification, and the development of the mineral and other resources of the area.

Work is proceeding on several other important features of the project, including the Rams Horn and Prospect Mountain tunnels and facilities at Shadow Mountain Dam and the Adams tunnel.

Calendar of Meetings

NATIONAL

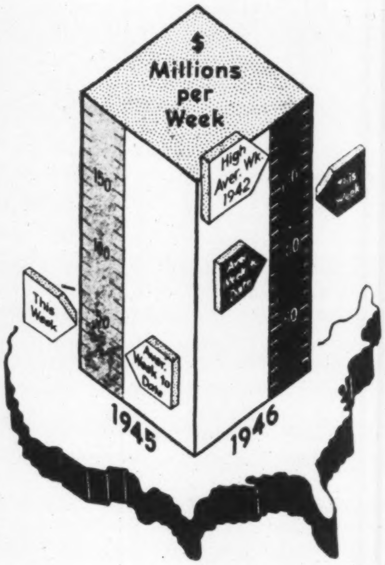
American Society of Civil Engineers, 1946 summer convention, Davenport Hotel, Spokane, Wash., July 17-20.

REGIONAL

Ninth Annual Short Course for water and sewage personnel, Louisiana State University, Baton Rouge, La., July 25-27.

American Shore and Beach Preservation Association, summer meeting, The Breakers, Cedar Point, Ohio, Aug. 15-17.

CONSTRUCTION ACTIVITY



As Reported this week to . . .
Engineering News-Record

CONTRACT VOLUME

Continental U. S. Only
(Thousands of Dollars)

	Week of July 4 1946	Cumulative 1946 (27 wks.)	Cumulative 1945 (27 wks.)
Federal	$36,835	$350,537	$499,072
State & Mun..	31,021	670,766	138,353
Total Public ..	$67,856	$1,021,303	$637,425
Total Private.	55,656	1,734,395	269,550
U. S. Total...	$123,512	$2,755,698	$906,975

WHERE CONSTRUCTION ACTIVITY ORIGINATED THIS WEEK

Type of Work	Dollar Volume (Thousands) This Week	Cumulative 1946 (27 wks.)	Cumulative 1945 (27 wks.)
Waterworks	$1,183	$47,499	$21,223
Sewerage	878	46,691	14,960
Bridges	991	64,928	13,273
Highways	24,841	383,677	99,237
Earthwork, Waterways	28,883	223,597	20,219
Buildings, Public.	6,302	169,261	309,381
Industrial	18,983	545,898	183,808
Commercial ...	35,381	1,078,122	52,510
Unclassified	6,070	196,025	192,364

NOTE: Minimum size projects included are: Waterworks and waterway projects, $22,500; other public works, $40,000; industrial buildings, $55,000; other buildings $205,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1946 (27 wks.)	Cumulative 1945 (27 wks.)
NON-FEDERAL	....	$310,682
Corporate Securities	....	79,670
State and Municipal	....	208,612
RFC Loans	....	22,400
FEDERAL	....	251,010
Total Capital	....	$561,692

ENR INDEX NUMBERS

Index Base = 100		1913	1926
Construction Cost...	June '46	347.91	167.24
Building Cost	June '46	264.16	142.80
Volume	May '46	284	125

CONSTRUCTION REPORTS

Bids Asked — Low Bidders — Contracts Awarded

(Daily service also available—Write for details)

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ELSIE EAVES, Manager *J. A. MAHONEY, Reports* *J. V. McEWEN, M. R. ROESSLER, Statistics*

WATER SUPPLY

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 10

S. C., Swansea — Town, T. S. Haiger, clk., High School Auditorium, water distr. sys., well, turbine pump, etc. 750 gal. steel tank on 100 ft. tower. Tomlinson Eng. Co., 1307 Marion St., Columbia, engr. CD 9/20—ENR 9/27.

Bids Asked

Ill., Kankakee — Div. Architecture & Engineering, State Armory Bldg., Springfield, June 18, watermain addns., Kankakee State Hospital, from Caldwell Engr. Co., Jacksonville. **$37,388.** CD 6/13—ENR 6/13.

LOW BIDDERS

†Calif., Port Chicago—Yards & Docks Annex, Navy Dpt., Arlington, Va., June 25, imprv. fresh water supply lines at Naval Magazine, Spec. 17835, NOY 13716, from Fredrickson & Watson Constr. Co., 873 81 Ave., Oakland (1), **$209,000.** CD 6/5—ENR 6/13.

★**Calif., San Diego**—City, Civic Center Bldg., June 25, El Monte pipeline, Doc. No. 362069, from American Pipe & Constr. Co., 4635 Firestone Blvd., South Gate, concrete pipe **$1,315,708;** from Consolidated Contractors, affiliate of Consolidated Steel Co., Box 6880, East Los Angeles, steel pipe **$1,547,200.** CD 6/5—ENR 6/13.

Calif., San Francisco—Pub. Utilities Comn., City Hall, June 25, San Andres Outlet 3, connecting pipes in San Mateo Co., Spec. 410, from Macco Constr. Co., Freight and Ferry Sts., Oakland and Morrison-Knudsen Co., 111 Sutter St., San Francisco, **$328,173;** laying 4-to 12-in. c.i. mains in Anzavista subdivision, Spec. 424, from E. J. Treacy, 425 Dewey Blvd., **$50,875.**

Minn. Menahga—Village, O. L. Back, clk., Village Hall, rejected bids June 17, water supply and distr. sys. Will readvertise. CD 5/29—ENR 6/6.

R. I., Tiverton—Town, Stone Bridge Fire Dist., June 24 Contr. 1, water sys. distr. and storage, from R. Zoppo, 44 Ramsdell Ave., Roslindale, Mass., **$79,511.** CD 6/14—ENR 6/20.

Wis., Amherst—Village, A. S. Smith, clk., June 11, laying watermains, from Bahr Const. Co., 2204 S. 10 St., Manitowoc. **$27,864.** CD 5/29, under Sewers, etc.

Wis., Cobb—Village, W. W. Kolb, clk., received no bids Apr. 30, pump. sta. and sewage plant. W. G. Kirchoffer, 22 N. Carroll St., Madison, engr. CD 4/17—ENR 4/25.

CONTRACTS AWARDED

Ala., Cullman—City, WW sys., to Sullivan, Long & Hagerty, Bessemer, **$147,277.** CD 5/28—ENR 5/30.

Minn., Edina (P.O. Minneapolis)—Village, B. Hawthorne, clk., Village Hall, watermain exten., W. 52, and W. 57 Sts., to Phelps Drake Co., 825 Metropolitan Life Bldg., Minneapolis, **$33,836.** Bids 5/27. CD 2/26—ENR 3/21.

Minn., Rochester — City, F. R. Finch, clk., watermains, to C. G. Fraser, 506 Prior Ave. N., St. Paul. **$30,476.**

N. B., Fredericton—Municipality, Fredericton, watermains, day labor. **$30,000.** CD 2/21 ENR 3/7.

Tex., Crosbyton—City, WW sys. imprvs., to Shook-Owens Constr. Co., Odessa, **$23,100.** CD 11/2—ENR 11/29.

Tex., Eldorado — City, City Hall, c.i. water distr. sys., to Taylor Constr. Co., P. O. Box 648, Taylor, **$23,424.** Est. $28,000. CD 6/4—6/6.

†Va., Portsmouth — Yards & Docks Annex, Navy Dpt., Arlington, imprv. water supply for protection against fire, NOY 13392, to A. G. Pinkston Co., Old Kierr Bldg., **$214,865.** Est. $214,869. Bids 5/31. CD 5/16—ENR 5/23.

Ont., Leaside (P.O. Toronto)—Municipality, R. V. Burgeas, clk., watermains in 9 St., to Ruscica Bros., 25 Industrial St. Est. **$32,000.** D. E. Crawford, Bessborough Dr., engr. CD 3/21.

Que., Montreal—Municipality, restoring, repairing 36 in. watermains along Greene Ave., to Canada Lock Joint Pipe Co., Ltd., Toronto, Ont. **$218,435.** CD 2/21—ENR 3/7.

SEWERS, WASTE DISPOSAL

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 9

Wis., Rib Lake—Village, F. L. Becker, clk., Prop. 1, sanitary sewers and watermains; Proposal 2, steel elevated storage tanks and tower, $180,000. McMahon Engrg. Co., Menasha, engr.

Bids Asked July 10

N. H., Laconia—State, Comptrollers office, State House, Laconia, sewage disposal plant, treatment facilities, Laconia State School. Metcalf & Eddy, 1300 Statler Bldg., Boston, Mass., engrs. CD 6/15/45—ENR 6/28/45.

Bids Asked July 11

★**Ill., Chicago**—Sanitary Dist. of Chicago, 910 S. Michigan Ave., Southwest Sewage Treatment Works, Div. AE, del., installing misc. electrical material and apparatus, motors and motor starting, control and protective apparatus, etc. Plans deposit $50. Bids 6/6 rejected. L.B. **$575,874.** CD 6/11—ENR 6/13.

Bids Asked July 15

N. Y., New Rochelle—Dpt. P. Wks., New Rochelle, drains and lateral, various locations. Extended date. Haven & Emerson, 233 Bway., New York, Zone 7, engrs. CD 6/11—ENR 6/13.

Wis., Green Bay—City, C. Centen, clk., 2 story, 53x77 ft., steel, rein.-con., brick incinerator bldg., concrete fdn., two 60 ton incinerator units, 100 ft. brick chimney, 20 ton truck scale, hydraulic freight elevator, L. A. Geniesse, 226 N. Washington St., archt. F. J. Steeno, city engr. CD 2/8/45—ENR 2/22/45.

Bids Asked July 30

N. C. Wilmington — City, J. R Benson, clk., City Hall, sanitary sewer exten. Plans deposit $25. J. A. Loughlin, city engr. CD 4/12—ENR 5/2.

LOW BIDDERS

Calif., Laguna Beach—City, City Hall, rejected bids May 29, sanitary sewers, outfall and treatment plant revisions, Cliff Drive and other streets. L.B. **$419,258.** Will readvertise. CD 6/5—ENR 6/13, under L.B.

Ill., Normal — City, City Hall, June 19, sewers, Beaufort, Linden, Main, School, Twin Grove Sts., Normal Ave., Cypress Alley, etc., from Cassidy Constr. Co., Melrose Park. **$371,999.** CD 5/28—ENR 5/30.

Minn., Madison — City, R. H. Granander, clk., rejected bids May 23, sewage treatment plant. L.B. **$106,970.** CD 5/9—ENR 5/16.

Minn., Menahga—Village, O. L. Back, village clk., Village Hall, rejected bids June 17, sanitary sewerage sys. and sewage treatment plant. Will readvertise. CD 5/29—ENR 6/6.

Tex., Houston — City, M. H. Westerman, secy., June 17, Simms Bayon sewer treatment plant, contr. 2, sludge pump bldg., screen and excess sludge pump bldg., ducts, pump, etc., from R. P. Farnsworth & Co., Inc., Box 74. **$168,879.** CD 6/10.

Wis., Amherst—Village, A. S. Smith, clk., June 11, sanitary sewers, from Bahr Const. Co., 2204 S. 10 St., Manitowoc, **$73,558.** CD 5/29.

Wis., Racine—City, H. A. Nelson, comr., June 18, storm and intercepting sewer, Marquette St. from Tomaro, Carle & Tomasini, 3404 E. Armour Ave., Cudahy, **$49,261.** W. J. Chadwick, city engr.

CONTRACTS AWARDED

Mass., Needham—Dpt. P. Wks., Town Hall, Contr. 1, sanitary sewers, various streets, to Richard White Sons, 67 Cherry Pl., Newton, **$34,430.** CD 6/10.

N. J., Washington — Washington Boro, sewage treatment plant addn. to Hadley Contracting & Contr. Co., 1213 Wood St., Phila., Pa. **$43,800.** Bids 6/17. M. Glace & Associates, 22 S. 22 St., Harrisburg, Pa., engrs. CD 5/1—ENR 5/9.

Tex., Crosbyton—City, sanitary sewer exten., to Shook-Owens Constr. Co., Odessa, **$40,000.** H. N. Roberts & Assoc., Lubbock, engrs. CD 11/2—ENR 11/29.

Tex., Eldorado — City, City Hall, sanitary sewerage sys., to Taylor Constr. Co., P. O. Box 648, Taylor, **$41,286.** Est. $60,000. CD 6/4—ENR 6/6.

N. B., Fredericton—Municipality, sewers, day labor. **$50,000.** CD 2/7—ENR 2/21.

Ont., Leaside (P. O. Toronto)—Municipality, R. V. Burgess, clk., sewers in 10 streets, to Ruscica Bros., 25 Industrial St. Est. **$40,000.** D. E. Crawford, Bessborough Drive, engr. CD 3/21.

Wis., Jefferson—Jefferson Co. Drainage Dist. 5, Jefferson, D. V. Smith, secy., approx. 347,148 cu. yd. drainage work, to F. Zimmer, Madison, at 12.5c. per cu. yd. Bids 6/22.

Que., Rouyn—Town, D. Desilets, secy., main sewer in western part of town, to Grant-Mills, Ltd., 531 York St., Montreal. Approx. **$63,000.** CD 4/4/45—ENR 4/19/45.

BRIDGES

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 8

Connecticut—State Hy. Dpt., W. J. Cox, comr., State Office Bldg., Hartford, bridge over railroad, Route 32, Mansfield. $100,000. CD 520—ENR 5/30.

Connecticut—State, W. J. Cox, hy. comr., Hartford, 30 ft. span, concrete bridge, 315 ft. traffic bound gravel approaches over Whiting River, North Canaan; 93 ft. steel skew span girder bridge Wilbur Cross Parkway, Vernon; 14 ft. span rein.-con. bridge over Veits Brook Beech Hill Rd. and rolled beam bridge over Sandy Brook on Sandy Brook Rd., Colebrook. 2 span, steel beam bridge, 1,380 ft. rolled bank run gravel approaches over Hartford Turnpike, and 2 span, rein.-con. hy. bridge over Bishop St., 655 ft. waterbound macadam approachs, Bishop St., both Wilbur Cross Parkway, North Haven.

Bids Asked July 11

Fla., Jacksonville—City, bridges and culverts.

LOW BIDDERS

California—State Div. Hys., Sacramento, rejected bids June 12, bridge, approaches at Big Butte Creek about 6.5 mi. east of Butte City, Glenn and Butte Counties. L. B. **$83,931.** CD 6/19—ENR 6/27.

PROJECTS COVERED

Projects—By Size

Construction projects here reported cover **the United States and Canada,** are of these **minimum** sizes or larger: water supply, **earthwork,** waterworks $22,500; other public works $40,000; industrial buildings $55,000; other buildings $205,000.

Classes of Construction

(Name in order of Listing)

- Water Supply
- Sewers, Waste Disposal
- Bridges
- Streets & Roads
- Earthwork, Waterways
- Latin America
- Public Buildings
- Commercial Buildings
- Industrial Buildings
- Unclassified

Stages Reported

PROPOSED WORK: Including appointment of engineers or architects.

BIDS ASKED (new announcements only). For full calendar, see also preceding issues of ENR.;

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Symbols and Abbreviations Include:

†	Federal Government
★	Project of $500,000 or over
ENR	Engineering News-Record
CD	Engineering News-Record Construction Daily

BRIDGES (Low Bidders, Cont'd.)

California—State Div. Hys., Sacramento, rejected bids June 5, rein.-con. bridge across south fork of Pit River at Likely, Modoc Co. L. B. **$38,907.** CD 5/10—ENR 5/30.

Georgia—State Hy. Dpt., G. T. McDonald, dir., Atlanta, June 24, bridge at Alcova River on Monroe-Walnut Grove Rd., SAP 1982-A (1), Walton Co., from H. M. Pafford, Waycross, **$40,946.**

†Nebraska—U. S. Eng., 601 Davidsou Bldg., Kansas City, Mo., rejected bids June 7, bridge Harlan Co. Will readvertise. CD 6/14—ENR 6/20.

North Carolina—State Hy. & P. Wks. Comn., Raleigh, June 25, structures, 7.691 mi. Proj. 5281, Davidson Co., from J. H. Brinkley, Thomasville, **$109,468*****structures, Proj. 6782, Scotland Co., from W. F. Brinkley, Granite Quarry, **$85,479*****relocating bridge and approaches, grading, etc. 1.136 mi. Proj. 6782, Scotland and Hoke Counties, from Zeigler-Cline Constr. Co., Fayetteville, **$86,421.** Received no bids June 25, bridge at Lumber River, Proj. 6782, Scotland and Hoke Counties, **$25,000-$50,000.** CD 6/17—ENR 6/20.

Michigan—State Hy. Dpt., Lansing, June 13, bridge, SB 2 of 82-11-6C-1 over U.S. 12, Wayne Co. from J. H. Baker & Sons, 1118 First St., Port Huron. **$91,273.** CD 6/4—ENR 6/6.

Missouri—State Hy. Comn., Jefferson City, June 21, bridge, Carter Co., from Porter De Witt Const. Co., Poplar Bluff, **$41,794**; bridges over Caldwell Co. and Sullivan Co., from C. E. Maxwell Const. Co., Columbus, Kan., **$47,485** and **$45,085** respectively. CD 6/6—ENR 6/12.

Texas—State Hy. Comn., J. S. Redditt, ch., Austin, June 25, 0.192 mi. Frio River and relief bridges, Live Oak Co., from Austin Bridge Co., P. O. Box 1590, Dallas, **$116,222.** CD 6/17.

West Virginia—State Rd. Comn., Charleston, June 18, Bridge 1659, continuous I-Beam spans, Proj. S-252 (2), Gilmer Co., from Boso & Ritchie, Ravenswood. **$60,146.** CD 6/10—ENR 6/13.

Wisconsin—State Hy. Comn., Madison, received no bids June 25, Little Baraboo River bridge and approaches, etc., Sauk Co. CD 6/6—ENR 6/12.

CONTRACTS AWARDED

Montana—State Hy. Comn., Helena, grading, bridging 12.2 mi. Roundup-Forsyth Rd., Musselshell Co., to Stanley H. Arkwright, Inc., Billings, **$172,501.** Est. $172,000. Bids 6/20. CD 6/4—ENR 6/6.

STREETS AND ROADS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 5

Ill., Waukegan—R. M. Lobdell, supt. Lake Co. Hy. Dpt., Waukegan, applying bituminous materials and aggregates for various Twp. roads.

Bids Asked July 8

Connecticut—State, W. J. Cox, hy. comr., Hartford, traffic bound gravel surfacing 11,225 ft. Parish Hill, Cemetery, Gager Hill and Khouris Rds., Scotland; rolled bank run gravel surfacing 14,462 ft. Green Haven Rd., Stonington; 5,882 ft. Stony and Birch Mt. Exten. Rds., Bolton; bituminous macadam paving 1,697 ft. Long Hill Ave., Shelton; 2,633 ft. Queen St., Newtown; bituminous macadam paving and exten. bridge over Pequonnock River, 4,280 ft. Rte. 111, Trumbull; rein.-con. dual lane paving 14,362 ft. Derby and New Haven Aves., Derby and Orange; macadam paving 2,700 ft. Center and Broad Sts. and 1,826 ft. storm sewers, trunk line projects, Manchester; traffic bound gravel surfacing 23,402 ft. End Hill, Beech Hill and Sandy Brook Rds., Colebrook; rolled bank run gravel surfacing 21,306 ft. Oscaleta, Peacable Hill, Whipstick, Boomer Rds. and North St., Ridgefield; rein.-con. paving 18,929 ft. dual lane Rte. 5, Wilbur Cross Parkway, Wallingford to U.S. Route 6 E. Main St., Meriden; twin 8 x 10 ft. rein.-con. box culvert at Broad Brook and rolled bank run gravel surfacing 600 ft. Jewett City Rd., Preston.

Bids Asked July 10

★ **New York**—H. A. Cohen, dir. Bureau Contrs. & Accounts, Albany, Zone 1, grading, structures Southern Exten. Bronx River Parkway, BRP 46-2, $743,000, and BRP 46-4, $582,000, both Bronx Co.; Northern State Parkway, NSP 46-2, Nassau Co., $570,000; reconstructing Cherry Valley-Sharon Springs Hy., FARC 46-28, Schoharie Co., $892,000; reconstructing Bear Mt. Bridge, easterly approach, FARC 46-29, Westchester Co., $1,142,000; rustic timber guide railing Briarcliff to Crotonville, RC-46-101, Westchester Co., $42,000, bids 5/29 rejected. CD 6/3—ENR 6/6, under LB.

Kan., LaCrosse—R. C. Warnock, City Clk., City Hall, street imprvs. Plans deposit $10. Wilson & Co., 223 North Santa Fe, Salina, engrs. CD 11/30—ENR 12/13.

Bids Asked July 11

New Hampshire—State Hy. Dpt., Concord, bit. stab. gravel surface course 2.389 mi. Moscoma Valley Rd., Grafton, Grafton Co., $46,000; 4 in. gravel on gravel surfacing, surface treated with tar 3.569 mi. Daniel Webster Hy., U.S. 3, Lancaster and Northumberland, Coos Co., $161,000; 2 in. road mix on gravel surfacing 1.706 mi. Route 9, Chesterfield, Cheshire Co., $130,0000.

Bids Asked July 12

Minnesota—State Hy. Dpt., St. Paul, grading 1.9 mi T.H. 1-160, FAS 42 (2), S.P. 3101-05; 7.4 mi. T.H. 165-101 FAP 915 B (1), S.P. 6610-02; grading, concrete box culverts, 4.7 mi. T.H. 73-162, S.P. 6931-02; bituminous surfacing 1.7 mi. T.H. 16-9 S.P. 2801-12 and T.H. 44-44, S.P. 2304-06; stabilized base and bituminous wearing surface 7.9 mi. T.H. 100-212, S.P. 0210-18, and T.H. 100212, S.P. 2755-15 and T.H. 100-212, F 239 (4), S.P. 6239-14. Over $40,000 each. O. L. Kipp, St. Paul, ch. engr.

Minn., Foley—M. G. Winter, aud. Benton Co., Foley, on behalf of the State Comr. of Hys. acting as agent for the county stabilized base and bituminous surfacing 7.4 mi. hy. between S.A.R. 4 (Popple Creek) and S.A.R. 1, east of Sauk Rapids, S.P. 05-502-02 (S.A.R. 3) Minn. Proj. S 86 (1). Plans deposit 50c. O. L. Kipp, St. Paul, ch. hy. engr. State Hy. Dpt., engr. CD 3/19/45—ENR 4/5/46.

Vermont—State Hy. Dpt., Montpelier, double tack coat refined tar and pea stone seal surfacing 0.984 mi. hy. Essex. $50,000. Plans deposit $4.

Bids Asked July 15

Minn., Olivia—C. A. Strom, aud. Renville Co., on behalf of State Hy. Comr., acting as agent for the county, grading 8.1 mi. hy. between State Aid Rd. 4 and Trunk Hy. 212 at Renville, 127,931 cu. yd. excav., 9,659 cu. yd. screening and loading gravel, 41,246 cu. yd. hauling gravel, S.P. 65-503-02, S.A.R. 6 Minn. Proj. S 222 (2), grading 3.5 mi. between point 3.5 mi. west of Lakeside and Lakeside, 48,119 cu. yd. excav., 4,196 cu. yd. screening and loading gravel, 24,603 cu. yd. mi. hauling gravel (county projects). Over $40,000. O. L. Kipp, St. Paul, ch. engr., State Hy. Dpt.

Minn., Warren—L. G. Johnson, aud. Marshall Co. on behalf of State Hy. Comr. acting as agent for county, grading, graveling 6.5 mi. hy. between Alma Creamery and 1.5 mi. east of Middle River State Park, 118,689 cu. yd. excav., 5,480 cu. yd. crushing, screening and loading gravel and 23,993 cu. yd. hauling gravel, S.P. 45-509-02 (S.A.R. 4) Minnesota Proj. S. 667 (2). Over $40,000. Plans deposit $1.70. O. L. Kipp, ch. engr. State Hy. Dpt.

Bids Asked July 17

California—State Div. Hys., Sacramento, portland cement base surfacing, applying armor coat 2 mi. between Hazel View Summit and 2.1 mi. south of Oregon line in Del Norte Co.; applying seal on 21.4 mi. between 3 mi. east of Paynes Creek and Morgan Summit, Tehama Co. G. T. McCoy, state hy. engr.

Bids Asked July 18

California—State Div. Hys., Sacramento, plant mix surfacing, widening shoulders 1 mi. between 6 St. and 0.4 mi. north of Imperial Hy., Los Angeles Co. G. T. McCoy, state hy. engr.

Calif., Redwood City—City, R. S. Dodge, clk., City Hall, grading, resurfacing, pavement, curbs, gutters, sidewalks, rein.-con. culverts, stormwater sewers, appurtenances, Hudson St. between Jefferson Ave. and Woodside Rd., Grand St. between Roosevelt and Vera Aves., Lincoln Ave. between Fulton and Hudson Sts., sewer laterals Grand St. and Lincoln Ave. Plans deposit $5. D. S. Wilson, city engr. CD 12/13/44—ENR 12/28/44.

Ia., Ottumwa—City, paving 26 blocks. $109,225. A. Reichtein, city engr.

Bids Asked July 24

California—State Div. Hys., Sacramento, grading, plant mix surfacing 9.9 mi. between Rte. 83 near Alamanor and Plumas Lassen Co. line 2 mi. west of Westmore, Plumas Co. G. T. McCoy, state hy. engr.

Bids Asked July 25

California—State Div. Hys., 808 State Bldg., Los Angeles, grading, asphaltic concrete paving 12.7 mi. Calexico to El Centro, Imperial Co., over $40,000; 0.3 mi. Arroyo Seco Parkway, College to Bernard Sts., Los Angeles Co., over $40,000. G. T. McCoy, hy. engr.

LOW BIDDERS

Alabama—State Hy. Dpt., Montgomery, rejected bids June 7, imprv. 0.266 mi. Conecuh Co. L.B. **$59,204.** CD 6/13—ENR 6/20, under LB.

California—State Div. Hys., Sacramento, June 20, imprvs. 3.1 mi. Midway to Banning, Riverside Co., from Herz Paving Co., P.O. Box 191, San Bernardino. **$52,450.** CD 6/3—ENR 6/6.

Calif., Sacramento—City, City Hall, June 21, imprv. 5 Ave. Tracts 1 and 2, from McGillivray Constr. Co., Box 873, **$78,352**; imprv. East Sacramento Terrace Units 1 and 2, from A. Teichert & Co., Box 1133. **$86,431.** CD 6/13.

Georgia—State Hy. Dpt., G. T. McDonald, dir., Atlanta, June 24, grading, base and surface treating 1.078 mi. Hampton-McDonough Rd., SAP 1778-A (2), Henry Co., from Henry Newton & Co., Decatur, **$56,773.**

★ **Georgia**—State Hy. Dpt., G. T. McDonald, dir, Atlanta, June 20, imprv 3.6 mi. Elberton-Hartwell Rd., SAP 1128 (6), Elbert Co., from C. M. Lyle, Gainesville, **$49,786*****2 mi. Waleska-Rydal Rd., SAP 1631 (5), Cherokee Co., from E. M. Beckham, Perry, Ga., **$42,112*****6.963 mi. LaGrange-Owensbyville Rd., SAP 1922-A (6), Troup Co., from W. L. Cobb, Decatur, **$133,431*****8.15 mi. Hartwell-Bowersville Rd., SAP 1118 (2), Hart Co., from Ledbetter-Johnson, Rome, **$83,959***** 2 mi. Madison-Monroe Rd., SAP 1553-B (5), Morgan Co., from Campbell Contracting Co., Columbus, **$46,399*****7.4958 mi. Samilla-Sylvester Rd., SAP 1563 (6), Mitchell Co., from Hugh McMath Constr. Co., Columbus, **$82,271** ***0.325 mi. Danville Spur Rd. and 3.49 mi. Danville Roadway in Wilkinson Co., PR 632-A (2), PR 632-B (2), PR 258 (2), Twiggs and Wilkinson Counties, from Central Sand & Asphalt Co., First National Bank Bldg., Atlanta, **$52,961*****5.03 mi. Ringgold-Tennessee State Line Rd., SAP 1676 (2) & SAP 1955 (1), Catoosa Co., from Ledbetter-Johnson, Rome, **$118,178*****SAP 1124-A (4), Oglethorpe Co., from Lokey Contracting Co., Thomson, **$40,534.**

Ill., Chicago—City, Dpt. P. Wks., City Hall, June 25, bituminous concrete paving W. 26 St. from S. California to S. Western Aves., from Union Contracting & Eng. Co., 30 N. LaSalle St., **$73,347.**

Maine—State Hy. Comn., Augusta, rejected bids June 19 imprv. 2.532 mi. hy. Sandy Bay Twp. L.B. **$192,951.** Will readvertise. CD 6/24—ENR 6/27.

Maryland—State Roads Comn., Baltimore, June 25, imprv. 5 mi. Contr. P-555-511, Prince Georges Co. and 4.86 mi. P-556-511, Prince Georges Co., from Bituminous Constr. Co., 2301 Ridgewood Ave., Baltimore, **$137,926** and **$154,402** respectively. CD 6/19.

★ **Massachusetts**—Commonwealth of Massachusetts, Dpt. P. Wks., Boston, June 25, constructing highway, 3 span steel stringer bridge with concrete deck, and 3 concrete box bridges in Gt. Barrington and Sheffield, from The Henley-Lundgren Co., 193 Hartford Pike, Shrewsbury, **$519,779.** Est. $541,875. CD 6/12—ENR 6/20.

Michigan—State Hy. Dpt., Lansing, June 13, imprv. 0.117 and 2.814 mi. Gratiot and Isabella Counties, from Gould & Cross, R.R. 4, Grand Rapids. **$62,240.** CD 6/4—ENR 6/6.

Michigan—State Hy. Dpt., Lansing, June 20, bituminous resurface course 1.711 mi. Jackson Co., from Mich. Asphalt Pav. Co., 1619 Irving Ave., Royal Oak, **$54,236*****concrete resurface course 8 mi. Berrien Co., from Mid-America Eng. Corp., St. Joseph, **$92,395*****bituminous concrete resurface course 6.939 mi. U.S.12, Lawrence to Paw Paw and 0.821 mi. west of Lawrence and 0.365 mi. on M-60 in village of Vandalia, Van Buren and Cass Counties, from J. L. Yerrington, Territorial Rd., R.F.D. 2, Benton Harbor, **$123,710.**

★ **Missouri**—State Hy. Comn., Jefferson City, June 21, from W. F. Menefee Const. Co., Sedalia, imprv. 3.019 mi. Franklin Co., **$87,925**; 2.174 mi. Franklin Co., **$107,740**; 4.047 mi. Dallas Co., **$121,738*****from Porter De Witt Const. Co., Poplar Bluff, 2.628 mi. Carter Co., **$197,525*****from Midwest-Precote Co., 7600 E. 17 St., Kansas City, Mo., 4.462 mi. Polk Co., **$62,836**; 4.559 mi. Polk Co., **$63,017**; 4.527 mi. Polk Co., **$60,711.** CD 6/6—ENR 6/13.

New Hampshire—State Hy. Dpt., Concord, June 25, imprv. 2.462 mi. Raymond-Nottingham Rd., Merrimack Co., from Frank Whitcomb Constr. Corp., North Walpole, **$77,224.** CD 6/21.

★ **New York**—Bureau Contrs. & Accounts, Albany, Zone 1, June 26, imprv. 2.81 mi. Greene Co., from Grandview Co., 6 Grandview Ave., Mt. Vernon, **$429,609** est. $440,000***3.53 mi. Erie and Wyoming Counties, from John F. Kendall Co., Jackson Bldg., Buffalo, **$394,641** est. $395,000***3.46 mi. Onondaga Co., and 0.77 mi. Steuben Co., from D. W. Kinkelman Co., Inc., Heffernan Bldg., Syracuse, **$593,733** est. $594,000 and **$169,427** est. $187,000 respectively***4.92 mi. Cayuga and Onondaga Counties, from Provo Bros., Inc., W. Hiawatha Blvd., Syracuse, **$558,164** est. $405,000***0.61 mi. Suffolk Co., from Zara Conrg. Co., Inc., Hewlett, **$165,601** est. $170,000. Received no bids June 26, imprv. 5.24 mi. Cattaraugus Co.; 3.95 mi. Chautauqua Co.; 7.1 mi. Dutchess Co.; 0.74 mi. Essex Co.; 3.63 mi. Ulster Co. CD 6/13—ENR 6/20.

★ **N. Y., Brooklyn**—President Brooklyn Boro, Boro Hall, June 26, connecting Hy., Contr. 4, from Del Balso Constr. Co., 220 E. 42 St., New York, Zone 17, **$5,835,750.** CD 6/17—ENR 6/20.

★ **North Carolina**—State Hy. & P. Wks. Comn., Raleigh, June 25, from Brown Paving Co., Lexington, imprv. 11.259 mi. Catawba Co., **$490,015*****from Rowan Constr. Co. Inc., Box 603, Salisbury, 0.138 mi. Guilford Co., **$89,753*****from Zeigler-Cline Constr. Co., Fayetteville, 5.835 mi. Robeson Co., **$83,283***** from W. E. Graham & Sons, Cleveland, 4.573 mi. Ashe Co., **$224,372*****from Blythe Bros. Co., 424 S. Brevard St., Charlotte, 9.062 mi.

STREETS AND ROADS (Low Bidders, Cont'd.)

Ashe Co., **$117,391;** 2.339 mi. Richmond Co., **$41,868*****from Lavender Bros., Earl, 2.834 mi. Wilkes Co., **$91,478*****from E. W. Grannis, Fayetteville, 7.691 mi. Davidson Co., **$320,873;** 8.269 mi. Bertie Co., **$237,098*****from W. C. Shepherd Co., Inc., 545 Piedmont Ave., N.E., Atlanta, Ga.; 5.283 mi. Carteret Co., **$72,376;** 6.134 mi. Duplin Co., **$149,594;** 9.609 mi. Pamlico Co., **$167,450;** 8.1 mi. Robeson Co., **$446,278;** 12.502 mi. Wayne Co., **$153,398*****from N. L. Teer, Durham, 8.694 mi. Caswell and Rockingham Counties, **$197,977.** Received no bids June 25, imprv. 2.768 mi. Perquimans Co., **$25,000-$30,000.** CD 6/17 and 6/20—ENR 6/20.

★ **Texas**—State Hy. Comn., Austin, June 25, from Kay Williams Constr. Co., West Highway 80, Midland, imprv. 10.899 mi. Bailey Co., **$72,578;** 6.792 mi. Upton Co., **$103,851***** from Oran Speer, Alvord and T. M. Brown & Son, Abilene, 23.651 mi. Brewster Co., **$232,056;** 14.971 mi. Denton Co., **$187,026;** 12.794 mi. Erath and Palo Pinto Counties, **$163,938** ***from L. H. Lacy & Co., P. O. Box 5726, Dallas, 5.003 mi. Red River Co., **$57,360;** 4.961 mi. Falls Co., **$42,229*****from F. C. Herrling, Kueten, 7.794 mi. Brazos Co., **$79,366***** from Kerr & Middleton, 2103 18th St., Lubbock, 6.686 mi. Bailey and Cochran Counties, **$49,066*****from M. E. Worrell, Route 5, Box 20, Austin ,7.448 mi. Navarro Co., **$451,852***** from H. R. Henderson & Co., Marshall, 13.808 mi. Dimmit Co., **$120,629*****from Wallace & Bowden, 5513 E. Grand Ave., Dallas, 23.627 mi. Kaufman and Denton Counties, **$64,538** ***from Uvalde Constr. Co., P. O. Box 3027, Dallas, 6.156 mi. Dallas Co., **$49,407*****from Wright & Ruminer Constr. Co., P. O. Box 4245, Sta. A, Dallas, Zone 8, 14.397 mi. Hill and McLennan Counties, **$57,945;** 10.379 mi. McLennan, Falls and Bell Counties, **$40,322** ***from Public Constr. Co., Denton, 8.946 mi. Denton Co., **$196,068*****from Heldenfels Bros., Rockport, 4.843 mi. San Patricio Co., **$70,733*****from R. W. McKinney, P. O. Box 190, Nacogdoches, 14.449 mi. Hardeman Co., **$176,637*****from E. Loyd, P. O. Box 1120, Fort Worth, 9.015 mi. Karnes Co., **$94,639** ***from Midwest Trucking Co., 2824 Colonial Ave., Waco, 8.227 mi. Stephens Co., **$50,374** ***from J. F. Buckner, P. O. Box 76, Cleburne, 13.165 mi. Roberts Co., **$95,229*****from A. L. Mays, Jasper, 3.807 mi. Jasper Co., **$68,770.** Received no bids June 25, imprv. 11.811 mi. Jack Co.; 10.962 mi. Newton and Orange Counties. CD 6/17.

Tex., Houston—Harris Co., H. L. Washburn, aud., June 17, imprv. 2.898 mi. Bellaire Blvd. and bridge at Armand St., from S. W. Gaylord Constr. Co., Box 6157. **$188,623.** Est. $186,000.

★ **West Virginia**—State Rd. Comn., Charleston, June 18, imprv. 2.338 mi. Fayette Co., from J. M. Fancesa & Co., Fayetteville, **$227,691;** 3.018 mi. Gilmer Co., and 6.262 mi. Greenbrier Co., from Keeley Constr. Co., Clarksburg, **$159,877** and **$386,908** respectively, rejected bids imprv. 10 mi. Preston Co. L.B. **$14,144.** CD 6/10—ENR 6/13.

Vermont—State Hy. Dpt., Montpelier, received no bids June 21 imprv. 1,233 mi. hy. Westmore. CD 6/10—ENR 6/13.

★ **Virginia**—State Hy. Dpt., Richmond, rejected bids June 20, imprv. 1.81 mi. and 1.47 mi. Fairfax Co. L.B. **$1,133,368.** Will readvertise. CD 6/25—ENR 6/27, under LB.

British Columbia—Province of British Columbia, Parliament Bldgs., Victoria, imprv. 7.1 mi. hy. between Red Gap and Craig's Crossing, Island Hy., from British Columbia Road Engrg. Co., Ltd., Vancouver, **$266,854;** 10.2 mi. Cariboo Hy. between Mile 57 and Mile 70, from Dawson, Wade & Co., Ltd., 775 Clark Drive, Vancouver, **$213,444.** A. Dixon, Parliament Bldgs., Victoria, engr. CD 6/12.

★ **Wisconsin**—State Hy. Comn., Madison, June 25, imprv. 0.11 mi. Sauk Co., from Hoffman Constr. Co., Black River Falls, **$252,170*****Proj. 6503, Clark Co., from Fox Valley Constr. Co., Appleton, **$184,942*****10.16 mi. and 14.182 mi. Taylor Co., from Rein & Dahl, Stoughton, **$202,626** and **$236,590** respectively***0.909 mi. Lincoln Co., from A. H. Proksch, Iron River, Mich., **$58,567*****10.793 mi. Lincoln and Oneida Counties, from McLean-Astleford Co., St. Paul, Minn., **$268,042** ***7.168 mi. Oneida Co., from John O'Keefe, De Pere, **$278,814*****15.328 mi. Option 3, Crawford Co., from S. J. Groves & Sons Co., 510 Wesley Temple Bldg., Minneapolis, Minn., **$161,304*****6.471 mi. Option 2 and 8.857 mi. Option 1, Crawford Co., from H. Turner & Sons, Boscobel, **$179,327** and **$296,023** respectively***0.228 mi. Brown Co., from Theo. Froemming Sons, 1901 S. 1 St., Milwaukee, **$46,817*****1.849 mi. Waupaca Co., from Universal Engrg. Co., Medford, **$192,038*****8.9 mi. Eau Claire Co., from Jos. D. Bonness, Inc., 1429 N. 27 St., Milwaukee, **$329,625***** 8.65 mi. Monroe Co., from A. Overgaard, Elroy, **$257,771*****10.36 mi. Racine Co., from J. P. Humphries, Inc., 2959 N. Downer Ave., Milwaukee, **$102,849.** Received no bids June 25, imprv. 0.098 mi. Dodge Co. CD 6/6—ENR 6/13.

CONTRACTS AWARDED

★ **California**—State Div. Hys., Sacramento, imprv. 2.2 mi. Bay Shore Freeway from Broadway in Burlingame to State St. in San Mateo, San Mateo Co., to G. F. Atkinson Co., Orange and Railroad Aves., South San Francisco. **$627,782.** Bids 5/29, awarded 6/24. CD 6/4—ENR 6/6, under LB.

★ **California**—State Div. Hys., Sacramento, imprv. 8.2 mi., constructing 3 bridges between Calaveras River and Lodi, San Joaquin Co., to Fredrickson & Watson Constr. Co., 873 81 Ave., Oakland. **$811,180.** Bids 6/5, awarded 6/24. C D 6/11—ENR 6/13, under LB.

★ **California**—State Div. Hys., Sacramento, imprv. 2.6 mi., Placer Co., to Frederickson & Watson Constr. Co., 873 81 Ave., Oakland, **$614,493.** Bids 5/22, CD 5/27—ENR 5/30, under LB.

★ **California**—State Div. Hys., Pub. Wks. Bldg., Sacramento, imprv. 2 mi., Yuba and Sutter Counties, to Lester L. Rice, 605 14 St., Marysville, **$594,741.** Bids 5/29, awarded 6/24, CD 6/4—ENR 6/6, under LB.

Ill., Paxton—Supt. Hys. Ford Co., Court House, furnishing, spreading 38,006 cu. yd. No. 8 crushed stone, or spec. gr. furn. 242 lin. ft. 10- to 15-in. rein.-con. culvert pipe, 50 mi. hy. Button, Dix, Patton, Peach, Orchard and Wall Twps., to D. B. Bayles, Paxton. **$48,593.** Bids 6/3, awarded 6/6. CD 5/29.

Iowa—State Hy. Comn., Ames, bituminous surfacing State Park, MS-7, Div 2, to Iowa Road Bldg. Co., Fairmont, Minn. **$52,077.** Bids 6/11—CD 6/4—ENR 6/6.

★ **Kansas**—State Hy. Dpt., Fredonia, to Concrete Material & Const. Co., Granby Bldg., Cedar Rapids improv., 4.714 mi. Greenwood Co., **$114,716;** 6.68 mi. Wilson Co., **$157,127***** to M. W. Watson, Bank of Topeka Bldg., Topeka, 0.247 mi. Franklin Co., **$41,922***** to A. F. Reis, Bank of Topeka Bldg., Topeka, 6.121 mi. Bourbon Co., **$54,486;** 7.107 mi. Bourbon Co., **$89,112;** 3.676 mi. Linn Co., **$45,353.** Grand total $502,716. Bids 6/7 CD 5/28.

Kansas—State Hy. Dpt., Great Bend, imprv. 11.831 mi. hy. Barton Co., to Southwest Sand & Gravel Co., Dodge City, **$43,136.** Bids 5/22, awarded 6/20. CD 5/6—ENR 5/9.

Kansas—State Hy. Dpt., Ness City, imprv. 12.271 mi. hy. Hodgeman Co., and 12.47 mi. Ness Co., to Brace Smith Const. Co., Dodge City, **$135,964** and **$142,256** respectively. Bids 6/14, awarded 6/20. CD 6/3—ENR 6/6.

Kansas—State Hy. Dpt., Sharon Springs, imprv. 17.385 mi. Rooks Co., to Inland Const. Co., 3867 Leavenworth St., Omaha, Neb., **$75,295*****16.822 mi. Wallace Co., to D. G. Hansen, Logan, **$108,656*****13.965 mi. Graham Co., to H. M. Thompson & Co., Ellenwood, **$69,261.** Grand total $253,212. Bids 6/5. CD 5/21—ENR 5/23.

Kan., Clay Center—Clay Co., Clay Center, imprv. 4.843 mi. hy., to H. Henny, Ottawa. **$49,985.** Bids 6/18, awarded 6/20. CD 6/3—ENR 6/6.

Kan., Leavenworth—Leavenworth Co., imprv. 4.514 mi. S 14 (3) to M. W. Watson, Bank of Topeka Bldg., Topeka, **$42,604.** Bids 6/11, awarded 6/20. CD 5/28—ENR 6/6.

Mass., Boston — City, City Hall Annex, sheet asphalt paving, sewerage, Columbus Ave., Ward 9, to John Deveney & Co., 17 St. Anne St., Jamaica Plain, **$161,417.** Bids 6/7, CD 5/31; Morton St., to Walter Reed Corp., 1078 Boylston St., **$38,000.** Bids 6/13, awarded 6/24, CD 6/6.

Minnesota—State Hy. Dpt., St. Paul, imprv. 16.6 mi. between Meire Grove and Trunk Hy. 55, to Jack Roth Constr. Co., 350 West Idaho Ave., **$128,876;** 22.8 mi. between Junction Trunk Hy. 371 and 2.3 mi. east of Junction TH 84, to McCree & Co., 918 New York Bldg., St. Paul, **$187,723.** Bids 6/14. CD 5/29—ENR 6/6.

Minnesota—State Hy. Dpt., St. Paul, imprv. 15 mi. between Faribault and north Rice line, to McCree & Co., 918 New York Bldg., St. Paul, **$56,947.** Bids 6/21. CD 6/5—ENR 6/13.

Minnesota—State Hy. Dpt., St. Paul, at District Maintenance Office, Bemidji, production of mineral aggregate for gravel lifts, screen, load and haul about 42,337 cu. yd., crush screen, load and haul about 15,566 cu. yd., to Loveall & Scott, Winnebago, **$40,020;** stabilized gravel base, plant mix bituminous surfacing 14.8 mi. S.P. 6502-03 (TH 4-70) F 232 (1), to Duininck Bros. & Gilchrist, Olivia, **$227,748.** Bids 6/14. CD 5/29—ENR 6/6.

★ **Mississippi**—State Hy. Comn., W. Spiva, dir., Jackson, imprv. 7.801 mi. Forest Co., to Mid-South Corp., New Orleans, La., **$518,581** est. $250,000***12.154 mi. Tishomingo Co., to Memphis Stone & Gravel Co., Exchange Bldg., Memphis, Tenn., **$197,860** est. $160,000***7.38 mi. Monroe Co., to Hyde Constr. Co., Jackson, **$230,088** est. $120,000***9.314 mi. Leake Co. to Barber Bros. Co., Reymond Bldg., Baton Rouge, La., **$127,104** est. $120,000***8.663 mi. Neshoba Co., to R. M. Lily, Fidelity Bank Bldg., Baton Rouge, La., **$101,717** est. $186,000 *** 21.234 mi. Rankin Co., to R. B. Tyler Co., 1446 Levering St., Louisville, Ky., **$234,560** est. $200,000***7.73 mi. Chickasaw and Monroe Counties, to J. B. Michael & Co., 1021 Haywood St., Memphis, Tenn., **$272,302** est. $170,000***8.891 mi. Washington Co., to F. D. Harvey, Memphis, Tenn., **$131,713** est. $90,000. Grand total $1,813,926. Bids 6/25, rejected bids June 25, imprv. 1.713 mi. Benton Co., **$95,000;** 3.435 mi. Tallahatchie Co. **$480,000.** CD 6/13.

★ **Montana**—State Hy. Comn., Helena, imprv. 3.9 mi. Deer Lodge Co., and 4.4 mi. Beaverhead Co., to L. A. Lockwood Constr. Co., Missoula, **$88,221** est. $83,000 and **$117,564** est. $107,000 respectively***12 mi. Blaine Co. to O'Beil Constr. Co., Havre and Nilson-Smith Constr. Co., Great Falls, **$153,089,** est. $165,000 ***4. mi. Flathead Co., to Union Constr. Co., Great Falls, **$63,679,** est. $64,000; 4.5 mi. Lewis & Clark Co., and 4.9 mi. Cascade Co., to Nilson-Smith Constr. Co., Great Falls, **$67,367** est. $62,000 and **$127,642** est. $140,000 respectively ***6.5 mi. Beaverhead Co., to R. P. Herrick Co., Butte, **$72,202,** est. $70,000***5.9 mi. Phillips Co., to Nolan Bros., Inc., 20 N. 2 St., Minneapolis, Minn., **$149,916,** est. $154,000***Armington-Lewiston Rd., Cascade Co., to Stanley H. Arkwright, Inc., Billings, **$153,313,** est. $151,000. Grand total $992,993. CD 6/4, 6/5—ENR 6/6.

Mo., St. Louis—City, c/o A. C. Meyers, dir. Streets and Sewers, City Hall, Zone 3, mat coating process resurfacing, involving filling holes with asphalt, covering with gravel and rolling South Broadway, southern city limits to Chippewa St., 7 St., Bway, north to Park Ave. and 6 St., Market St. to Delmar Blvd., parts of 7 and 8 Sts., between Market St. and Franklin Ave., own forces. Over **$100,000.** CD 4/26/43—ENR 4/29/43.

★ **New York**—H. A. Cohen, dir. Bureau Contrs. & Accounts, Albany, imprv. 7.35 mi. road, Allegany Co., to Collins-Forrestel Corp., Hornell. **$1,140,156.** CD 6/3—ENR 6/6, under LB.

Okla., Tulsa—Tulsa Co., Tulsa, to Layman & Co., Daniels Bldg., imprv. 2.83 mi. road, **$51,819,** est. $52,794; 2.06 mi. road **$40,290,** est. $41,534; and 2 mi. road, **$42,273,** est. $42,400. Grand total $134,382. Bids 6/7, awarded 6/20. CD 6/14—ENR 6/20.

Ore., Gresham—City, City Hall, imprv. 6 mi. streets, installing drainage sys., to Babler Bros., 4617 S. E. Milwaukie Blvd., Portland, **$134,230.** Est. $139,430. Bids 6/14. CD 6/5—ENR 9/27.

Ore., Independence—City, City Hall, paving 34 blocks streets, to Warren-Northwest, Inc., N.E. 102 St. and Warren Rd., Portland, **$75,640.** E. Hines, city engr.

Tex., Dallas—City, asphalt paving 24 street sections, to Markham & Brown-Kearney, Crume & Co., Construction Bldg. **$72,068.**

Tex., Eldorado—City, L. Baker, mayor, grading, draining, streets, to Schwope Bros., 1014 W. Laurel St., San Antonio. **$77,228.** CD 3/7—ENR 3/21.

★ **West Virginia**—State Rd. Comn., Charleston, imprv. 5.884 mi. Putnam Co., to Smith Constr. Co., and Price Constr. Co., Huntington. **$630,141.** CD 6/4—ENR 6/6.

Manitoba—Province of Manitoba, Winnipeg, building and stabilizing grade 5½ mi. through Assiniboia, to Nelson River Constr. Co., Ltd., 607 Union Trust Bldg., Winnipeg, **$233,466;** graveling highway between Stonewall and Teulon 18 mi., to Universal Constr. Co., Ltd., 303 Time Bldg., Winnipeg, **$131,941.** Dpt. P. Wks., Winnipeg, engr.

Man., Winnipeg—Province of Manitoba, Winnipeg, concrete surfacing 1.8 mi. McGillivray Blvd., to Nelson River Constr. Co., Ltd., 607 Union Trust Bldg. **$47,688.** CD 4/11.

Ont., Goderich—Huron County Council, Goderich, imprv. roads, own forces. **$250,000.** T. R. Patterson, Co. Bldgs., engr.

Que., Rouyn--Town, D. Desilets, secy., bituminous paving 1.96 mi. several streets, to La Sociate l'Entreprises Generales, Ltd., Amos, approx. **$97,000.** CD 3/18—ENR 4/4.

EARTHWORK, WATERWAYS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 10

†N. H., Nashua—U. S. Eng., 31 St. James Ave., Boston, 16, Mass., furnishing pump equip. for flood protection. Ser. No. 19-023-46-102.

Ore., Klamath Falls—Klamath Drainage Dist., 12 Melhase Bldg., 8 mi. irrigation canal. Over $22,500. W. L. Wales, 1209 Lincoln St., engr.

Bids Asked July 11

†Arkansas—U. S. Eng., P. O. Box 60, Vicksburg, approx. 148,000 cu. yd. earthwork on Terre Noire Creek, Clark Co., Inv. 22-052-46-243.

†Ark., Mountain Homes—U. S. Eng., 300 Broadway, Little Rock. Bull Shoals Dam. Extended date. CD 4/9—ENR 4/11.

La., New Iberia—Iberia Parish Police Jury, New Iberia, 459,000 cu. yd. excav., Petite Anse Bayou area, 358,000 cu. yd. Loreauville area, and 458,000 cu. yd. Jeanerete Area.

Bids Asked July 18

†Louisiana—U. S. Eng. foot of Prytania St., New Orleans, 5 pile dikes, totalling 2,535 lin. ft. Red River, 10 mi. above Alexandria, Rapides Parish. Ser. 16-047-46-328.

Bids Asked July 19

†N. Y., Mattituck—U. S. Eng., 120 Wall St., New York, Zone 5, dredging 55,600 yd. at East Jetty.

EARTHWORK, WATERWAYS. (Bids Asked, Cont'd.)

Bids Asked July 23

†Pa., Marcus Hook—U. S. Eng., 1400 Penn Mutual Bldg., Phila. Zone 1, dredging exten. to Marcus Hook Anchorage, Delaware River, Phila. to the Sea, Inv. 36-109-46-150. Over $750,000.

Bids Asked July 24

†New Jersey—U. S. Eng., 1400 Penn Mutual Bldg., Phila., 1, Pa., maintenance dredging in Entrance Channel to Salem River, Inv. No. 36-109-46-154.

Bids Asked July 25

†Texas—Bureau Reclamation, Denver, Colo., furnishing, del. f.o.b. cars at shipping point or f.o.b. cars at Austin, gasoline-engine-driven generator set, 75 kva., 0.8 power factor, consisting of generator, engine, switchboard, fuel tank, wheels for operation of 3 ft. 6 in. gage track for Marshall Ford Dam, Colorado River Proj., Texas, Spec. 1939.

†Washington—Bureau Reclamation, Coulee Dam, constructing Potholes Dam Columbia Basin Project, on Crab Creek, about 15 mi. west of Warden, Spec. 1400.

Bids Asked July 29

†California—Bureau Reclamation, Redding, installing 2 main generators in Shasta Power plant, Kennett Div., Central Valley Proj., Spec. 1396.

Bids Asked July 30

†Colorado — Bureau Reclamation, Denver, earthwork, structures for Aspen Creek Siphon Marys Lake Powerplant, penstock, spillway, switchyard, Marys Lake Reservoir Dikes and road relocation, Prospect Mountain Conduit, Estes Powerplant, penstocks, switchyard, Colorado-Big Thompson Proj., 1 mi. east to 4½ mi. southwest of Estes Park, Spec. 1393.

LOW BIDDERS

†California—Bureau Reclamation, Denver, Colo., June 14, jet pump for fish trap at Keswick Dam, Kennett Div., Central Valley Proj., Spec. 1317, from Pacific Coast Eng. Co., Alameda. **$26,800.** CD 5/17—ENR 5/23.

†Calif., Stockton—Yards & Docks Annex, Navy Dpt., Arlington, Va., rejected bids June 18, berthing facilities for inactive vessels at Naval Supply Annex, Rough & Ready Island, Spec. 17842. L. B. **$331,050.** CD 6/21—ENR 6/27.

†Mass., West Springfield—U. S. Eng., 819 Industrial Trust Bldg., Providence, 2, R. I., rejected bids May 22, foundation treatment for W. Springfield dike, LB. **$453,880.** CD 5/29—ENR 6/6, under LB.

†Missouri and Nebraska—U. S. Eng., 601 Davidson Bldg., 10 E. 17 St., Kansas City, Zone 8, Mo., June 17, revetments Missouri River at Mt. Vernon to White Cloud Bends, Ser. 23-028-46-194, from W. P. McGeorge, Jr., 1024 Omaha Natl. Bank Bldg., Omaha, Neb., **$217,871.** CD 6/4—ENR 6/6.

Mo., St. Louis—City, c/o M. M. Kinsey, pres. Bd. Pub. Service, 304 City Hall, Zone 3, June 18, retaining wall to replace crib wall on west side south approach of Douglas MacArthur Bridge across Mississippi River, from J. E. Latta Constr. Co., 4500 Aubert Ave., Zone 15, **$49,650.** Est. $46,000. CD 5/24—ENR 5/30.

†Nebraska—U. S. Eng., 1709 Jackson St., Omaha, postponed bids to have been opened June 24, local flood control project, Platte River, near Schuyler, Ser. 25-066-46-398. CD 6/12—ENR 6/13.

†N. H., Nashua—U. S. Eng., Park Square Bldg., 31 St. James Ave., Boston, 16, Mass., rejected bids May 23, equipment, for flood control project, near East Hollis St. bridge. LB. **$17,996.** CD 4/23—ENR 4/25.

†O., Cincinnati—U. S. Eng., P. O. Box 1234, Zone 1, June 18, electrical and transformer platform modifications, Contr. 2G, Mill Creek, Ser. 33-015-46-67, from Harlan Electrical Corp., 4820 Lewis Ave., Toledo, **$150,547.** Est. $116,000. CD 5/29—ENR 6/6.

†Utah—Bureau Reclamation, Customhouse, Denver, Colo., June 14, steel pipes for Jordan Narrows Siphon and pump, plant penstock and discharge pipes, Spec. 1363, from Western Pipe & Steel Co. of Calif., 5717 S. Santa Fe Ave., Vernon, Los Angeles, Calif. **$113,670.** CD 5/28—ENR 6/6.

CONTRACTS AWARDED

†Arkansas—U. S. Eng., P. O. Box 97, Memphis 1, Tenn., sprigging and sodding 598 acres levee slopes in Phillips, Monroe and Deshea Counties, to M. R. Thomason, 121 S. Lewis St., Monroe, **$41,520.** CD 5/24.

★**†California**—Bureau Reclamation, Antioch, Delta-Mendota Canal, Stations 686 to 1365 and Westley Wasteway, Delta Div., Central Valley Proj., Spec. 1183, to H. H. Everist, Sr., 604 Mission St., San Francisco. **$3,530,068.** Bids 4/30, awarded 6/18. CD 5/3—ENR 5/9, under LB.

★**California**—U. S. Eng., 751 S. Figueroa St., Los Angeles, detached breakwater, Los Angeles and Long Beach Harbors, Serial 157, to T. E. Connolly Co., 461 Market St., San Francisco, Case-Connolly Co., San Pedro and Peter Kiewit Sons Co., Arcadia, **$7,447,700.** Bids 5/15. CD 5/20—ENR 5/23, under LB.

★**†Calif., San Francisco**—Yards & Dock Annex, Navy Dpt., Arlington, Va., dredging, disposal dredged material, filling at Naval Shipyard, Spec. 17851, NOY 13733, to Case Constr. Co., Box 416, Alameda, and American Pipe & Constr. Co., 4635 Firestone Blvd., South Gate, **$1,586,380.** CD 6/17—ENR 6/20.

★**†Colorado**—Bureau Reclamation, Denver, constructing Horestooth Dam, Satanka Dike and Soldier Canyon Dam, to Grafe-Callahan Constr. Co. and Gunther & Shirley Co., 7140 W. Olympic St., Los Angeles, Calif., and W. K. McIlyer, Dallas, Tex., **$5,111,877;** Dixon Canyon Dam and Spring Canyon Dam, to Hinman Bros. Constr. Co., and Rhoades Bros. & Shofner, 3869 Medford St., Los Angeles, Calif., **$4,319,427,** both for Colorado Big Thompson Project. Bids 5/16. CD 5/16—ENR 6/6, under LB.

†Mass., Boston—U. E. Eng., Park Square Bldg., Boston, rebuilding storm damage, harbor and Fort Warren, Georges Island, 19-023-46-94, to G. M. Byrne, 294 Washington St., **$27,260.** Bids 6/20. CD 5/31—ENR 6/6, under unclassified.

†Missouri—U. S. Eng., 601 Davidson Bldg., Kansas City, Zone 8, pile dikes in Missouri River, Malta and Seary Bends, Ser. 23-028-46-184, to Kansas City Bridge Co., BMA Bldg., (Plaza), Kansas City, Mo., **$279,488.** CD 5/21—ENR 5/23.

†Nebraska—U. S. Eng., 1709 Jackson St., Omaha, constructing 7.4 mi. earth levee extending Inne-Lusa sewer outlet to northern part of Omaha, to R. J. Ryan Co., Ottumwa, Ia., **$271,729.** Bids 6/6. CD 5/23—ENR 5/30.

†Nebraska and Iowa—U. S. Eng., 1709 Jackson St., Omaha, Neb., June 13, standard dikes and revetment in Missouri River at Kenslers-McCook Lake Bends, from Connor-Stavely Constr. Co., 419 City Bank Bldg., Kansas City, Mo., **$438,506.** CD 6/5.

★**†Washington**—Bureau of Reclamation, Court House, Denver, Colo., 125,000 bbl. cement for use in South Coulee Dam, feeder canal, Grand Coulee Dam pumping plant and structures in Columbia Basin Project, to Superior Portland Cement Co., Dexter Horton Bldg., Seattle, Zone 4, **$360,750;** 125,000 bbl., to Lehigh Portland Cement Co., 11 W. Washington St., Chicago, Ill., **$362,000.**

★**†Washington**—Bureau Reclamation, Coulee Dam, tunnel, siphon and 1,000 ft. sect. Main Canal, to T. E. Connolly, Inc., 461 Market St., San Francisco, Calif., **$3,494,420*****constructing 5.4 mi. canal, to J. A. Terteling & Sons, Inc., 4011 Fairview Ave., Boise, Idaho, **$1,548,060.** Bids 5/14. CD 5/20—ENR 5/23.

N. S., Dingwall—Dpt. P. Wks., Ottawa, Ont., dredging, to Saint John Dry Dock & Shipbuilding Co., Ltd., Bayside Dr., East Saint John. **$161,000.** K. M. Cameron, c/o owner, engr. CD 4/18—ENR 4/25.

N. S., Glace Bay—Dpt. P. Wks., Ottawa, Ont., dredging, to J. P. Porter & Sons, Ltd., 1010 St. Catherine St. W., Montreal, Que., approx. **$350,000.** CD 4/22—ENR 4/25.

LATIN AMERICA

Costa Rica, San Jose—Republic of Costa Rica, c/o Banco de Seguros, taking bids hospital, $1,500,000.

Chile, Valparaiso—Republic of Chile, Santiago, will construct 57 mi. underground water tunnel, by day labor. **$1,000,000.** Ministry of P. Wks., Santiago, engrs.

AMERICANS ABROAD

China—Chinese Supply Comn., awarded contract design and supervise construction seven 5,000 k.w. central power generating stations, to Gilbert Associates, Inc., 1417 K St., N.W., Wash., D. C., U. S. A. **$6,000,000-$9,000,000.**

PUBLIC BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 8

†Mass., Attleboro—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash. 25, D. C., post office repairs, imprvs., incl. boiler.

Bids Asked July 9

†Me., Houlton—Pub. Bldgs. Admin., 620 Post Office, Boston, Mass., post office imprvs. and repairs, incl. approaches. **FWA.**

Bids Asked July 10

★**Conn., Westport**—Town, Supt. Schools, 132 W. State St., school addn. $670,000. Extended date. Tooker & Marsh, 101 Park Ave., New York 17, N. Y., archts. CD 6/4—ENR 6/6.

Mo., Kirkwood (St. Louis 22, P. O.)—Pub. Bldgs. Admin., 514 Post Office Bldg., Kansas City, Mo., greenhouse repairs at Marine Hospital, 525 Couch Ave. **FWA.**

†N. Y., Poughkeepsie—Pub. Bldgs. Admin. Custom House, New York, Zone 4, repairing post office. **FWA.**

Tenn., Huntingdon—City, c/o mayor, brick, concrete, steel factory. $100,000. Heavner & Parish, Maurice Bldg., Jackson, archts.

Bids Asked July 17

Minn., International Falls—Memorial Hospital Addn., Koochiching Co., L. E. Beyer, secy., International Falls, 2 story, 40x145 ft., L-shaped rein.-con., brick hospital wing addn. Plans deposit $20. C. H. Buetow, 570 North Snelling Ave., St. Paul, archt.

Bids Asked July 20

Fla., Tallahassee—State, c/o Bd. Control, Tallahassee, dormitory addn. at Florida A & M College. Plans deposit $10. G. C. Fulton, 204 Peabody Hall, Gainesville, archt.

Bids Asked About July 21

†Mich., Sault Ste. Marie—U. S. Eng., 800 Guardian Bldg., Detroit, 31, hydro-electric power plant, at St. Mary's Falls, incl. dike, concrete sluiceway, intake and draft tube gates, sluice gates, 73 x 210 ft. power house, footbridge, timber crib dam, etc. Plans deposit $35. Tentative date. CD 4/27/44—ENR 5/18/44, under Michigan.

Bids Asked July 24

Ia., New Hampton—City, Alva Griffith, clk., furnishing, installing 2 Diesel engine generating units each with 1,000 to 1,200 hp. rating and auxiliary equip. $100,000. J. B. Harris Co., 702 Wesley Temple Bldg., Minneapolis, Minn., consult. engrs. CD 6/21/45—ENR 7/12/45.

Bids Asked July 26

★**Tex., Kingsville**—Texas College of Arts & Industries, c/o E. N. Jones, pres., 3 dormitories, dining room. $705,000. Plans deposit $25. Phelps & Dewees & Simmons, 1515 Majestic Bldg., San Antonio, archts. CD 6/25/45—ENR 7/12/45.

Bids Asked July 31

Tex., Denton—Texas State College for Women, Dr. L. H. Hubbard, pres., dining hall, laundry, bedroom addn. to Capps Hall. Extended date. Preston M. Geren, 806½ Burnet St., Fort Worth, Zone 2, archt. CD 6/13—ENR 6/20.

Bids Asked

N. Y., Long Beach—Long Beach Hospital, Water St., nurses home, $60,000. S. W. Katz, 460 Park Ave., Long Beach, archt.

LOW BIDDERS

★**Ala., Birmingham**—City, remodeling old municipal market office bldg., from J. F. Holley, 905 6 Ave. **$549,740.** CD 5/20—ENR 5/30.

†Calif., Inyokern—Yards & Docks Annex, Navy Dpt., Arlington, Va., June 19, various bldgs., facilities in Area G, Naval Ordnance Test Sta., Spec. 17509, from Haddock-Engineers, Ltd., 129 W. 2 St., Los Angeles. **$205,000.** CD 6/5.

†Calif., Mare Island—Yards & Docks Annex, Navy Dpt., Arlington, Va., received no bids June 20, vacuum sys. housing for Bldgs. A-80 and A-248, Naval Shipyard, Noy 13250, Spec. 17420. CD 6/5.

†Calif., Monterey—U. S. Eng., 74 Montgomery St., San Francisco, June 25, converting 13 barracks to military intelligence language school, Serial 04-203-46-57, from Stolte, Inc., 8451 San Leandro St., Oakland, **$261,656.**

†Calif., Port Chicago—Yards & Docks Annex., Navy Dpt., Arlington, Va., June 24, officers apartment and dormitory, Spec. 16300, NOY 12047, from Fredrickson & Watson Constr. Co., 873 81 Ave., Oakland, **$204,544.** CD 6/4—ENR 6/6.

Del., Seaford—Seaford Special School Dist., Seaford, June 18, school-shop, high school addn., from Rupert Constr. Co., 1509 French St., Wilmington. **$371,070.** J. J. Heintz, Inc., 14 Landers Land, Swanwyck, New Castle, engr. CD 5/31—ENR 6/6.

Ill., Jacksonville—State Dpt. P. Welfare, Div. Architecture & Engr., State Armory Bldg., Springfield, June 18, three 500 kw. turbo-generators for power plant, Veterans Rehabilitation Group, Jacksonville State Hospital, Proposal 2, from Elliott Co., Jeannette, Pa. **$91,505.** CD 6/13—ENR 4/19/45.

Mass., Amherst—Commonwealth of Massachusetts, Dpt. Educ., 200 Newbury St., Boston, rejected bids June 13, 3½ story, 82 x 152 ft., brick, steel, limestone home economics bldg. **$393,700.** Will readvertise. CD 5/31—ENR 5/3.

†Md., Annapolis—Yards & Docks Annex, Navy Dpt., Arlington, Va., received no bids June 21, 60 temporary quarters for married Naval Officers, Naval Academy, Spec. 17931. CD 6/5—ENR 6/13.

Md., Pikesville—State, Military Dpt., 5th Regimeent Armory, Baltimore, garage, altering, addns. to armory bldg. and barn, from Mullan Contg. Co., 3945 Greenmount Ave., Baltimore. **$314,645.** CD 9/18/44—ENR 10/5/44.

PUBLIC BUILDINGS (Bids Asked, Cont'd.)

Miss., Drew—City, J. A. Maxwell, mayor, City Hall, May 7, garment plant, to be **leased** to **Kay Ruth Garment Co.,** Jackson, from Central Constr. Co., Philadelphia, **$104,409.** Bids 5/7. CD **4/22**—ENR 4/25.

Mo., Brentwood (P. O. St. Louis 17)—City, O. A. Tuckett, mayor, 1700 Brentwood Blvd., rejected bids June 18, 2 story, brick, concrete, city hall addn., Eulalie Ave. and Brentwood Blvd. **Will readvertise.** Heagler & Co., 704 Rolla St., Rolla, engr. CD 6/3—ENR 6/6.

Neb., Lincoln—University of Nebraska, Lincoln, June 13, general contract classroom bldg., from Olson Constr. Co., 410 S. 7 St., Lincoln, **$362,597*****plumbing and heating, from Natkin & Co., 514 S. 11 St., Omaha, **$77,785*****electrical work, from ABC Electric Co., 3373 O St., **$31,143.** CD 6/6.

N. Y., Bronxville—Bd. Fire Comrs., Tuckahoe, rejected bids May 16, firehouse. L. B. **$138,500.** CD 4/23—ENR 4/25.

★**N. Y., New York**—New York City Housing Auth., 122 E. 42 St., New York, Zone 17, June 24, foundations for Jacob Riis City Houses and Jacob Riis Federal Houses, from Corbetta Const. Co., 220 E. 42 St., Zone 17. **$2,106,000.** CD 6/13—ENR 5/30.

★**†N. Y., West Point**—U. S. Eng., 120 Wall St., New York, Zone 5, June 28, gymnasium at U.S.M.A., from Grove, Shepherd, Wilson & Kunge, Inc., 247 Park Ave., New York, Zone 17, **$1,336,000.**

★**†O., Lima**—U. S. Eng., P. O. Box 1234, Cincinnati, Zone 1, June 19, tanks for ordnance vehicle storage, Lima Ordnance Depot, Spec. 33-015-46-83, from E. & C. Co. and Koch Constr. Co., 819 E. Burleigh St., Milwaukee 12, Wis. **$554,742.** CD 6/12—ENR 6/6.

★**†Tex., Camp Hood**—U. S. Eng., Fort Sam Houston, June 20, converting bldgs. for apartments (Inv. Ser. 41-154-46-12) (Spec. W-41-154-46-90), from P. O'B. Montgomery, 913 S. Akard St., Dallas, **$1,653,069,** alt. **$1,667,779.**

Tex., Fort Worth—W. O. Jones, act. city mgr., City Hall, June 19, garage and appurtenant bldgs. off Crestline Rd., from Paschal-Sanders Constr. Co., Majestic Bldg. **$204,000.** CD 6/4—ENR 6/6.

†Tex., Orange—Yards & Docks Annex, Navy Dpt., Arlington, Va., dry and cold storage bldg., from Mac's Constr. Co., 3238 Mandeville St., New Orleans, La., Items 1 and 2. **$60,000.**

†Wash., Fort Lewis—U. S. Eng., Textile Tower, 7 and Olive Sts., Seattle, Zone 1, June 20, converting 21 bldgs. into 62 apartments, Inv. 46-129, from Macdonald Bldg. Co., 1517 S. Tacoma Way, Tacoma, **$245,112.**

†Wash., Fort Lewis—U. S. Eng., Textile Tower, 7 and Olive Sts., Seattle, Zone 1, June 21, converting 37 bldgs., at Madigan General Hospital into 131 apartments, Inv. 46-132, from Macdonald Bldg. Co., 1517 S. Tacoma Way, Tacoma, **$458,765.**

†Wyoming—Bureau Reclamation, Custom House, Denver, Colo., June 20, turbines, governors and generators, Spec. 1269 for Kortes Power Plant, Kortes Unit, Missouri, Basin Proj., Spec. 1269, from Pelton Water Wheel Co., 2929 19 St., San Francisco, Calif., Sched. 1, **$269,000,** Sched. 2, **$73,265*****from Woodward Governor Co., Rockford, Ill., Sched. 2 **$73,365*****from Elliott Co., Jeanette, Pa., Sched. 3 **$360,711.** CD 5/20—ENR 5/23.

CONTRACTS AWARDED

†Calif., Oceanside—Yards & Docks Annex., Navy Dpt., Arlington, Va., fire protection in certain temporary structures, Camp Pendleton, near here, Spec. 17734, to Haddock Engineers, Ltd., 129 W. 2 St., Los Angeles, **$43,320.**

Ia., Vinton—City, L. L. Berry, clk., light and power plant imprvs., to Fairbanks-Morse Co., 9 and Harney Sts., Omaha, Neb. **$197,734.** Bids 6/14. R. W. Gearhart, Cedar Rapids, engr.

Minn., Adrian—Village, F. J. Forkenbrock, clk., Village Hall, furnishing, installing Diesel engine generating unit at Municipal Power Plant, to Worthington Pump & Mach. Corp., 2428 University Ave., St. Paul, **$65,418.** CD 6/5—ENR 6/13.

Minn., Willmar—City, Light & Power Comn., E. H. Brogren, clk., power plant installations, incl. 4,000 kw. turbine generator, to General Electric Co., River Rd., Schenectady, N. Y., and 630 Plymouth Bldg., Minneapolis, **$116,800;** surface condenser, to Allis Chalmers Mfg. Co., 1115 Foshay Tower, Minneapolis, **$32,000.** Bids 6/17. CD 5/29—ENR 6/6.

Miss., Grenada—City, c/o mayor, glass fabricating plant, to Currie & Corley, Raleigh. **$70,248.** CD 6/11/45.

†R. I., Newport—Yards & Docks Annex, Navy Dpt., Arlington, Va., converting barracks to apartments, N.T.S. NOY 13817, to O. Ahlborg & Sons, Inc., Cranston.

Tenn., Linden—City, c/o L. B. Duncan, Linden, factory, to Cowan Lumber & Planing Matl. Co., Dickson, **$105,000.** Heavner, Parish & Allen, Maurice Bldg., Jackson, archts. CD 5/1—ENR 5/9.

Tex., Corpus Christi—Corpus Christi Independent School Dist., 515 N. Carancahua St., Oak Park and Savage School addns., to M. W. Watson Co., c/o E. B. Jackson, 238 Nixon Bldg. **$286,487.** Brock & Anderson, 210 Jones Bldg., archts. CD 3/18—ENR 3/21.

★**†Va., Dahlgren**—Yards & Docks Annex, Navy Dpt., Arlington, ammunition preparation facilities, incl. bldgs., magazines, roads, walks, Naval Proving Grounds, Spec. 16187, NOY 11920, to J. D. Hedin Constr. Co., 820 Michigan Ave. N.E., Wash., D. C. **$960,000.** Bids 6/5. CD 6/6—ENR 6/13, under LB.

Ont., Tilbury—Wartime Housing, Ltd., 159 Bay St., Toronto, 50 houses, to G. T. Parmenter Constr. Co., Ltd., 1465 Yonge St., Toronto, approx. **$250,000.** W. J. McAdam, c/o owner, engr. CD 5/27—ENR 5/30.

†Alaska—Yards & Docks Annex, Navy Dpt., Arlington, Va., constructing utilities, site preparation and related community facilities for proposed housing, Adak and Attus, NOY 13913, to Johnson, Drake & Piper, Inc., and Puget Sound Bridge and Dredging Co., 2020 6 St., S.W., Seattle, Wash.

COMMERCIAL BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 15

Miss., Natchez — Natchez College, Natchez, demolishing and reconstructing administration bldg.

O., Akron—Erie R. R. Co., J. W. Smith, ch. engr., Midland Bldg., Cleveland, Zone 15, 2-level, 45 x 28 ft., 30 ft. deep, brick, stone, passenger station bldg. with escalator service, Broad Way between E. Exchange St. and Buchtel Ave. $300,000.

Bids Asked July 16

Ala., Montgomery—Huntington College, 1000 Fairview Ave., dormitory. Pearson & Tittle, First Natl. Bank Bldg., archts.

SOON LETS CONTRACT

O., Toledo—Catholic Diocese of Toledo, C. J. Alter, Bishop, 2544 Parkwood Ave., soon lets contract new 3 story, wing, incl. music room, classrooms, nurses' quarters, auxiliary cafeteria and girls gymnasium, Central Catholic High School. $250,000 to $300,000. Britsch & Munger, archts. and J. P. Macelwane, Nicholas Bldgs., asoc. archts. CD 5/3—ENR 5/9.

Pa., Icedale (P. O. Honey Brook) — Susquehanna Pipe Line Co., 1608 Walnut St., Phila., soon lets contract service bldg. $60,000. G. W. Pepper, Jr., 1600 Walnut St., Phila., archt.

LOW BIDDERS

Ont., St. Catherines — Religious Hospitallers of St. Joseph of Hotel Dieu, Archbishops Palace, Toronto, will not construct hospital. **$250,000.** Project abandoned. CD 2/21—ENR 2/28.

CONTRACTS AWARDED

★**Calif., Burbank**—G. R. Howard & G. S. Fruehling, 1031 S. La Brea St., Los Angeles, twenty-five 4 family apartments, 20 single family dwellings, 300 blocks north of Catalina, Florence and Naohi Sts., own forces, **$500,000.**

Calif., San Francisco—Pacific Gas & Electric Co., 245 Market St. 13 story, bsmnt. and addnl. 10 story to 5 story office bldg., to Cahill Bros., 206 Sansome St. Est. **$2,200,000.** A. Brown Jr., J. Bakewell, and Weihe, Frick & Kruse, 251 Kearny St., assoc. archts. CD 6/6—ENR 6/27.

Calif., Montebello—Raydan Bldg. Co., 453 S. Spring St., Los Angeles, 78 frame, stucco dwellings, near Lincoln and Poplar Aves., to Vinnell Co. (Building Div.), 108 W. 5 St., Los Angeles. Approx. **$475,000.**

★**Calif., Woodland** — W. Crawford, Sr., 106 Bartlett St., 50 homes, to Stolte, Inc., 8451 San Leandro St., San Leandro. Est. **$500,000.** T. B. Mulvin, Bank of America Bldg., Oakland, archt.

Del., Delaire (P. O. Wilmington) — Delaire Corp., 108 Edgewood Dr., Wilmington, residential development, own force. **$225,000.**

Del., Dover—G. D. Hilt, Walker Rd., residential development, separate contracts. **$205,000.**

★**Del., Elsmere**—Elsmere Bldg. Co., c/o C. Killoron, N. American Bldg., Wilmington, residences, own forces. Over **$750,000.**

★**Del., Elsmere** (P. O. Wilmington)—Elsmere Gardens Development Corp., Elsmere, residential development, separate contracts. **$660,000.**

Del., Lewes—Wilfred M. Melvin, Bay View Ave., residential development, separate contracts. Over **$220,000.**

Del., Newark—R. Y. Taggart, Elkton Heights, Elkton, Md., residential development, separate contracts. Over **$300,000.**

Del., New Castle—H. Fein, 1308 Harrison Ave., Wilmington, residential development, separate contracts. Over **$205,000.**

★**Del., New Castle**—Lingo & Donovan, Inc., 1308 Rodman Rd., Wilmington, residential development, separate contracts. Over **$750,000.**

Del., New Castle—Sheppheard & Co., 213 Greenhill Ave., Wilmington, residential development, separate contracts. Over **$205,000.**

Del., Newport—Defense Bldg. Corp., 1936 Lakeview Rd., Wilmington, residential development, separate contracts. Over **$300,000.**

Del., Roshill Manor (P.O. New Castle)—Builders Contracting Co., c/o C. Killoran, North American Bldg., Wilmington, 60 residences, separate contracts. **$350,000.**

Del., Wilmington — David Donoff, 2211 Spruce St., residential development, own forces. Over **$205,000.**

Del., Wilmington—Forest Brook Glen Corp., Hotel La Salle, New York, N. Y., residential development, separate contracts. Over **$205,000.**

★**Del., Wilmington**—Steiner-Massari Bldrs., 148 Ayers Court, Teaneck, N. J., residences, own forces. Over **$2,000,000.**

Del., Wilmington—A. J. Vilone, 1712 Linden St., residential development, separate contracts. **$240,000.**

Del., Wilmington Manor (P. O. Wilmington) —Gordy Constr. Co., du Pont Hy., Wilmington, residential development, separate contracts **$250,000.**

Del., Wilmington Manor (P.O. Wilmington) —The Stahl Co., 1022 Adams St., Wilmington, residential development, separate contracts. **$250,000.**

Fla., Fort Lauderdale—First Baptist Church of Fort Lauderdale, church bldg., auditorium and school, to Caldwell & Scott, Inc., 90 Broad St., New York, 4, N. Y. Est. **$350,000.** L. W. Geisler, Kissimmee,, archt.

Ind., Indianapolis—Bridges & Graves Co., 243 N. Del St., 40 homes in Rhodius Park Area, own forces. **$250,000.**

Fla., Orlando — Orlando Development Co., Orlando, 50 brick houses, to The Gabel Constr. Co., Orlando. **$350,000.**

Me., Van Buren — St. Bruno's Parish, Marist Congregation, Van Buren, 1 story, bsmnt., 75x145 ft., brick, steel, stone church, to Granger Constr. Co., 306 Main St., Worcester, Mass. Est. **$225,000.** E. T. P. Graham, 171 Newbury St., Boston, Mass., archt.

★**Md., Baltimore** — Century Constr. Co., 205 David St., 100 two story, 15x28 ft., brick, cinderblock residences Lake Ave., Pelham and Brenden Aves., separate contracts. **$500,000.**

Md., Baltimore — Marley Corp., 110 Reedbird Ave., 76 two story, bsmnt., 16x36 ft. residences, Cherry Hill Sect., separate contracts. **$420,000.** Hal A. Miller & Assoc., 337 St. Paul St., archt.

Md., Baltimore — Mullan Contracting Co., 3945 Greenmount Ave., 70 two story, bsmnt., 14x45 ft. and 19x32 ft., residences, Union Ave. and Berry St., separate contracts. **$420,000.**

Md., Baltimore — Stulman Bldg. Co., Munsey Bldg., 33 two story, bsmnt., 19x32 ft., brick, cinder block residences, separate contracts. **$237,000.** Hal. A. Miller & Assoc., 337 St. Paul Pl., archt.

Minn., St. Cloud — Gamble-Skogmo, Inc., 15 N. 8 St., Minneapolis, general contract, 1 story, 168x264 ft., structural steel, face brick, etc. store, St. Germain St., to Megarry Bros., St. Cloud. Est. **$300,000.** Larson & McLaren, 1901 Foshay Tower, Minneapolis, archt.

★**Mo., St. Louis** — Boulevard Frontage Co., 4209 S. Kingshighway Blvd., Zone 9, 2 story, bsmnt., 116x285 ft., brick, concrete, stone store and office, Hampton Ave. and Chippewa St. (part of Hampton Village development), to Hampton Village Realty Co., 4225 Hampton Ave., Zone 9. Est. approx. **$500,000.** P. J. Bradshaw, 3670 W. Pine Blvd. Zone 8, archt.

N. J., Camden — Sears Roebuck & Co., Roosevelt Blvd. and Adams Ave., Phila., Pa., retail store addn., to Irwin & Leighton, 1505 Race St., Phila., Pa., over **$205,000.** CD 11/18 —ENR 11/22.

N. Y., Roslyn Heights—Levitt & Sons, Northern Blvd., Manhasset, 55 homes, Hickory Lane, Browers Lane and Nassau Blvd. Owner builds. **$440,000.**

★**O., Columbus** — J. C. Robins, 2750 Fair Ave., 31 four-family apartments in courts along 2 streets running from Broad St. north to boundary of Columbus Army Air Service Forces Depot. Owner builds. **$800,000.** H. T. Roderick, 12 N. 3 St., archt.

★**O., Elyria**—Hannagan Bros., Urbana, 200 one story, frame single houses, radiant heating. Owner builds. **$1,500,000.** Ward & Conrad, Swetland Bldg., Cleveland, archts.

★**O., Wickoiffe**—Fuller & Davis Constr. Co., Adkins Rd., Willoughby, 104 single houses and park and playground at Buena Vista Park, Sunset and Beechwood Drs. Owner builds. **$625,000.**

Pa., Abington—Century Vault Co., 1150 E. Mermaid Ave., Phila., residential development, separate contracts. **$205,000.**

Pa., Allentown—N. Iacocca, 440 N. 7 St., residential development, separate contracts. **$205,000.**

COMMERCIAL BLDGS., (Contracts Awarded, Cont'd.)

Pa., Allentown—R. Q. Jarrett, 842 Hamilton St., residential development, separate contracts. Over **$210,000.**

Pa., Allentown—Mrs. G. Schnitzer, 35 N. 18 St., residential development, separate contracts. **$210,000.**

Pa., Allentown—Wm. P. Swoyer, 1308 N. 19 St., residential development, separate contracts. **$220,000.**

Pa., Allentown—Trexler & Croodman, 35 N. 18 St., residential development, separate contracts. **$220,000.**

Pa., Alsace—Gollub Bros., Birdsboro, residential development, separate contracts. Over **$205,000.**

Pa., Annville—Liskey Bros., Annville, residential development, separate contracts. **$220,000.**

Pa., Aquashicola (Palmerton P. O.)—J. A. Mooney, 204 Delaware Ave., Palmerton, residential development, separate contracts. Over **$205,000.**

Pa., Ardmore—Gables, Inc., 5141 Chestnut St., Phila., residential development, separate contracts. **$240,000.**

Pa., Bethlehem — Anton Barony, Hotel American, Bethlehem, residential development, separate contracts. **$210,000.**

Pa., Bethlehem—H. Campbell, 1207 Beverly Ave., residential development, separate contracts. **$150,000.**

Pa., Bethlehem—H. S. Campbell, 1207 Beverly Ave., residential development, Lane Ave., separate contracts. **$220,000.**

Pa., Bethlehem—E. S. Lichty, 951 Tilghman St., Allentown, residential development, separate contracts. **$220,000.**

Pa., Bethlehem—P. A. Ronca, 1303 Delaware Ave., residential development, separate contracts. Over **$205,000.**

Pa., Bloomsburg—H. R. Erwin & Son, Bloomsburg, residential development, separate contracts. **$205,000.**

Pa., Bon Air—K. E. Nagle, 249 E. Prospect St., York, residential development, separate contracts. Over **$205,000.**

Pa., Bridgeport—A. Lee, Bridgeport, residential development, separate contracts. **$240,000.**

Pa., Bristol—J. Delate & L. Falcone, Broad St. Bank Bldg., Trenton, N. J., residential development, separate contracts. **$210,000.**

Pa., Bristol—E. DiRiuzio, 1019 Wood St., residential development, separate contracts. Over **$205,000.**

Pa., Bristol—W. J. Talbot, 210 Jefferson St., residential development, separate contracts. **$210,000.**

★**Pa., Camp Hill**—N. P. Ninneman, Camp Hill, 89 residences, separate contracts. **$890,000.**

Pa., Camp Hill—N. P. Ninneman, 1 Park Circle, residential development, separate contracts. **$210,000.**

Pa., Carlisle—D. McCrea, 25 Walnut St., Carlisle, residential development, separate contracts. **$220,000.**

Pa., Chelsea (Chester P. O.)—H. F. King, West Chester, residential development, separate contracts. **$205,000.**

Pa., Chester—B. J. Diggins, 205 Parkway Ave., residential development, separate contracts. **$220,000.**

Pa., Chester—P. Lorance, 1451 Grant Ave., Woodlyn, residential development, separate contracts. **$205,000.**

Pa., Clarks Summit—Florey Lumber Co., Clarks Summit, residential development, separate contracts. **$220,000.**

Pa., Cleona (Lebanon P. O.)—A. Funk, Lebanon, residential development, separate contracts. Over **$205,000.**

Pa., Collingdale—F. Mousley, Collingdale, residential development, separate contracts. **$220,000.**

Pa., Columbia—G. E. Pfantz, 514 Chestnut St., residential development, separate contracts. **$210,000.**

Pa., Conshohocken—S. Vagnoni, 135 W. 7 Ave., residential development, separate contracts. Over **$205,000.**

Pa., Conynham—R. Cutler, Conynham, residential development, separate contracts. **$210,000.**

Pa., Cumberland—N. P. Ninneman, 1 Park Circle, Camp Hill, residential development, separate contracts. Over **$370,000.**

Pa., Darby—S. I. Hall, 943 Forrester Ave., Darby, residential development, separate contracts. **$205,000.**

Pa., Delaware Water Gap (Stroudsburg P. O.)—H. L. Keiper, 913 Main St., residential development, separate contracts. Over **$240,000.**

Pa., Doylestown—J. Barness, Warrington, residential development, separate contracts. Over **$205,000.**

Pa., Doylestown—S. Catz, Doylestown, residential development, separate contracts. **$210,000.**

Pa., Doylestown—H. Collins, 11 N. Main St., residential development, separate contracts. **$210,000.**

Pa., Doylestown—W. B. Townsley, Berwyn, residential development, separate contracts. **$220,000.**

Pa., Drexel Hill—Alexander Alessi, 2504 Garrett Rd., Drexel Hill, residential development, Fairfax Ave., separate contracts. **$220,000.**

Pa., Easton—A. E. & E. E. Frick, R.D. 3, residential development, separate contracts. **$220,000.**

Pa., Easton—F. Weiss, Riegelsville, residential development, separate contracts. **$205,000.**

Pa., Eddystone—Argyle Constr. Co., 455 Argyle Rd., Drexel Hill, residential development, separate contracts. Over **$250,000.**

Pa., Eddystone—Eddystone Homes, 53 Long Lane, Upper Darby, residential development, separate contracts. **$250,000.**

Pa., Emaus—F. Chiles, Monocacy Park Rd., Bethlehem, residential development, separate contracts. **$240,000.**

Pa., Emaus—M. E. Stryer, 656 Evergreen St., residential development, separate contracts. Over **$300,000.**

Pa., Ephrata—H. Nissley, Ephrata, residential development, separate contracts. Over **$205,000.**

Pa., Feasterville—E. Stoltz, Feasterville, residential development, separate contracts. **$220,000.**

Pa., Folsom—Kelleher & Yagle, 516 S. 42 St., Phila., residential development, separate contracts. **$240,000.**

Pa., Folsom—Wm. Thorn, 621 Main St., Darby, residential development, separate contracts. **$210,000.**

Pa., Glen Olden—Kelleher & Yagle, 516 S. 42 St., Phila., residential development, separate contracts. **$240,000.**

Pa., Glen Rock—W. N. Deffendall, Glen Rock, residential development, separate contracts. **$205,000.**

Pa., Glen Rock R.D., (York P.O.)—John R. Smith, Glen Rock R.D., residential development, separate contracts. Over **$205,000.**

Pa., Harrisburg—C. Holland, 11 Portage Ave., residential development, separate contracts. **$220,000.**

Pa., Harrisburg—W. M. Hollinger, 203 Market St., residential development, separate contracts. **$250,000.**

Pa., Harrisburg—S. Keener, 2922 Parkside Lane, residential development, separate contracts. **$210,000.**

Pa., Harrisburg—Wm. J. McConlogue, 509 Emerald St., residential development, separate contracts. Over **$300,000.**

Pa., Highland Park (Lebanon P.O.)—N. P. Ninneman, 1 Park Circle, Camp Hill, residential development, separate contracts. **$375,000.**

Pa., Hokendauqua—Dr. C. J. Newhart & M. H. Lansky, Hokendauqua, residential development, separate contracts. Over **$205,000.**

Pa., Holmes—Ashbern Constr. Co., 707 MacDade Blvd., Collingdale, residential development, separate contracts. **$210,000.**

Pa., Kingstown—R. Garrahan, 1828 Wyoming Ave., Forty Fort, residential development, separate contracts. Over **$205,000.**

Pa., Kutztown—Berry Bros., Kutztown, residential development, separate contracts. **$220,000.**

Pa., Lancaster—L. A. Benedick, 112 N. Queen St., residential development, separate contracts. **$220,000.**

Pa., Lancaster—P. Bomberger, 201 Pearl St., residential development, separate contracts. **$205,000.**

Pa., Lancaster—J. Herbert Fehl, 207 E. King St., Lancaster, residential development, separate contracts. **$220,000.**

Pa., Lancaster—Lancaster Constr. Co., 654 George St., residential development, separate contracts. **$240,000.**

Pa., Lancaster—J. S. Mellinger, 49 N. Duke St., residential development, separate contracts. **$220,000.**

Pa., Lancaster—Smithgalt-Binkele, 645 4 St., residential development, separate contracts. Over **$240,000.**

Pa., Lancaster—D. S. Warfel, 452 N. Prince St., residential development, separate contracts. **$220,000.**

Pa., Laureldale—J. A. Habel, Laureldale, residential development, separate contracts. Over **$205,000.**

Pa., Lebanon—Lebanon Constr. Co., Inc., 1258 Willow St., residential development, separate contracts. **$220,000.**

Pa., Lehighton—Lehighton Home Builders, Lehighton, residential development, separate contracts. **$220,000.**

Pa., Littlestown—I. H. Crouse & Sons, residential development, separate contracts. **$210,000.**

Pa., Lock Haven—M. L. Claster & Sons, Inc., Lock Haven, residential development, separate contracts. **$220,000.**

Pa., Lock Haven—H. H. Gramley, 202 E. Main St., Lock Haven, residential development, separate contracts. Over **$240,000.**

Pa., Macungie—F. Chiles, Monocacy Park Rd., Bethlehem, residential development, separate contracts. **$220,000.**

Pa., Mechanicsburg—Dallys Z. Fickes, Mechanicsburg, residential development, separate contracts. **$210,000.**

Pa., Media—W. G. Clark, Park Ave., residential development, separate contracts. **$220,000.**

Pa., Middletown—L. Levinson, 3433 Ridge Ave., Phila., residential development, separate contracts. **$240,000.**

★**Pa., Mount Carmel**—B. and W. Lumber Co., Hickory and Railroad Sts., residential development, separate contracts. **$500,000.**

Pa., Mt. Holly Springs—D. Stayer, Mt. Holly Springs, residential development, separate contract. **$210,000.**

Pa., Mt. Wolf—C. Mohr, Mt. Wolf, residential development, separate contracts. Over **$205,000.**

Pa., New Britain—Royal E. Myers, 4[illegible] Court St., Doylestown, residential development, separate contracts. **$205,000.**

Pa., New Cumberland—F. R. Leib, New Cumberland, residential development, separate contracts. Over **$205,000.**

Pa., New Holland—F. I. & Sons, New Holland, residential development, separate contracts. **$210,000.**

Pa., New Hope—J. T. Hogan, 108 Seville St., Phila., residential development, separate contracts. **$220,000.**

Pa., Newtown—Russell Janney, Newtown, residential development, separate contracts. **$220,000.**

Pa., Norristown—Epwood Constr. Co., 153 Chestnut St., Phila., residential development, separate contracts. **$220,000.**

Pa., Oreland—Sunnybrook, Inc., Carmel Ave., Glenside, 66 residences, separate contracts. Over **$450,000.**

Pa., Oreland—Sunnybrook, Inc., Carmel Ave., Glenside, residential development, separate contracts. **$225,000.**

Pa., Palmerton — Reitz Snyder & Butz, Palmerton, residential development, separate contracts. **$250,000.**

Pa., Paoli—J. K. Seidle, 5239 Chestnut St., Phila., residential development, separate contracts. **$250,000.**

Pa., Parkside (Chester P.O.)—B. J. Diggins, Avon Rd., residential development, Avon Rd., separate contracts. **$220,000.**

Pa., Phila. — Provident Trust Co., 17 and Chestnut St., bank addns., alterations, to Turner Constr. Co., 1500 Walnut St., over **$205,000.** S. Martin, 1700 Walnut St. archt. H. Gibson, 1700 Walnut St., engr. CD 2/19—ENR 2/21.

Pa., Phila. — Roberts Constr. Co., 717 Germantown Ave., residential development, Ardleigh, separate contracts. **$300,000.** C. H. Fries, 3701 N. Broad St., archt.

Pa., Clifton Heights—Rittenhouse Constr. Co., 1420 Chestnut St., Phila. residential development, separate contracts. Over **$205,000.** F. L. Petrillo, Crozer Bldg., Phila., archts.

★**Pa., Clifton Heights** — Warner West Corp., 7052 Garrett St., Upper Darby, 606 residences, Oak and Baltimore Aves., separate contracts. Over **$5,000,000.**

Pa., Phila. — Cunningham Constr. Co., 6241 Market St. residential development Frankfort Sect., separate contracts. **$300,000.** C. H. Fries, 3701 N. Broad St., archt.

Pa., Phila. — M. M. Goldman, 5737 Woodcrest Ave., residential development, separate contracts. Over **$205,000.**

Pa., Phila. — C. Litman, 2117 N. Hobart St., Phila., residential development, separate contracts. Over **$205,000.** L. J. Cowan, 123 Market St., archt.

Pa., Phila.—Curtis Bailey Co., 69 and Walnut Sts., Upper Darby, residential development, separate contracts. Over **$220,000.**

Pa., Phila.—J. T. Hogan, 108 Seville St., residential development, separate contracts. Over **$205,000.**

Pa., Phila.—L. Kirschner, 5402 Lebanon Ave., 25 residences, Hale St., separate contracts. **$225,000.**

Pa., Phila.—E. Pearl, 2100 Delancey St., 32 residences, Roosevelt Blvd. and Ashdale St., separate contracts. **$420,000.**

Pa., Phila.—P. J. Stahl, 7975 Oxford Ave., residential development, Pratt St. and Loretta Ave., separate contracts. **$240,000.**

Pa., Phila.—Albert Steinberg, c/o J. F. Maguire, 511 Frankford Ave., residential development, Pratt St., separate contracts. **$380,000.**

Pa., Phila.—Vacca Bros., 1526 Delancey St., residential development, separate contracts. **$210,000.**

Pa., Phila.—C. Werner, Box 131, Oakford, residential development, Princeton and Castor Aves., separate contracts. Over **$205,000.**

Pa., Phillipsburg—L. Stein, 8 N. Front St., Phillipsburg, residential development, separate contracts. **$220,000.**

COMMERCIAL BLDGS., (Contracts Awarded, Cont'd.)

Pa., Pottsville—A. C. Lewars, 1313 W. Norweigon St., residential development, separate contracts. **$250,000.**

Pa., Quakertown—W. Hickey, Quakertown, residential development, **separate contracts.** Over **$210,000.**

Pa., Reading—Berkshire Greens, Inc., Mount Penn. Ave. residential development, separate contracts. Over **$250,000.**

Pa., Reading—Berks Home Builders, Inc., 147 N. 5 St., residential development, separate contracts. **$250,000.**

Pa., Reading—D. J. Hartman, 1545 Cortland Ave., residential development, separate contracts. **$210,000.**

Pa., Reading—J. Norman Klein, 46 N. 6 St., Reading, residential development, separate contracts. Over **$205,000.**

Pa., Reading—M. B. Stillings, 510 Mercer St., residential development, separate contracts. **$240,000.**

Pa., Reifton—Paul D. Kauffman, Reifton, residential development, separate contracts. **$220,000.**

Pa., Royersford—Wm. H. Kulp, Limerick, residential development, separate contracts. **$220,000.**

Pa., Sellersville—C. D. Moyer, Silverdale, residential development, separate contracts. **$210,000.**

★**Pa., Shamokin**—B. & W. Lumber Co., Hickory and Railroad Sts., Mount Carmel, residential development, separate contracts. Over **$1,000,000.**

Pa., Sharon Hill—Sharon Development Co., 17 Park Ave., Norwood, residential development, separate contracts. Over **$500,000.**

Pa., Shippensburg—F. Argleroad, Shippensburg, residential development, separate contracts. **$210,000.**

Pa., Slatington—G. German, 138 Main St., residential development, separate contracts. Over **$205,000.**

Pa., Souderton—Valentine Crouthamel, Souderton, residential development, separate contract. **$220,000.**

Pa., Spring City—E. T. Weaver, Sr., Spring City, residential development, separate contracts. **$210,000.**

Pa., Springfield—Al Duncan, 206 Ballymore Rd., residential development, separate contracts. **$260,000.**

★**Pa., State College**—College Park Homes, Inc., State College, residential development, separate contracts. Over **$500,000.**

Pa., Towanda—Towanda Land Co., Park Ave., residential development, separate contracts. **$240,600.**

Pa., Trucksville—D. J. Kulp, 147 W. Dorrance St., Kingstown, residential development, separate contracts. Over **$205,000.**

Pa., Upper Darby—69th St. Community House Corp., 418 McClatchy Bldg., Upper Darby, residential development, separate contracts. Over **$220,000.**

★**Pa., Upper Moreland Twp. (Willow Grove P. O.)** — Rosemore Bldg. Co., Willow Grove, residential development, separate contracts. Over **$500,000.**

Pa., Waynesboro — H. A. Stover, 152 W. Main St., residential development, separate contracts. **$210,000.**

Pa., West Chester—United Realty & Constr. Co., Inc., West Chester, residential development, separate contracts, **$250,000.**

Pa., West Reading—Potteiger Co., Inc., West Reading, residential development, separate contracts, **$260,000.**

Pa., West Hempfield Twp. (Lancaster P. O.)—H. G. Rohrer, R.D. 1, residential development, separate contracts. **$240,000.**

Pa., Williamsport—Faxon Constr. Co., 442 William St., residential development, separate contracts. Over **$300,000.**

Pa., Windsor—Howard G. Peters, Windsor, residential development, separate contracts. **$205,000.**

★**Pa., Whitmarsh** — S. S. Tolt, 2338 Lincoln Liberty Bldg., Phila., residential development, separate contracts. Over **$600,-000.**

Pa., Wyndmoor (Sta. Phila.) — D. J. Maguire, Real Estate Trust Bldg., residential development, separate contracts. **$220,000.**

★**Tenn., Chattanooga** — Welwood Development Corp., M. Craig, vice-pres., 115 houses. Owner builds. **$1,200,000.**

Tenn., Knoxville — F. S. McMahan Constr. Co., Sevierville, 55 brick, 5 or 6 room houses, own forces. **$400,000.**

Tex., Houston — Howard Housing Co., c/o J. Knostman, archt., 2017 W. Gray St., 50 residences, W. Mulberry Pl., to M. Nadleman, c/o archt. **$435,500.**

★**Tex., Houston**—F. W. Sharp & Assoc., 6901 Lyons St., 153 residences, Davy Crockett Addn., Kirby Dr. and W. Alabama Ave., own forces, **$1,071,030;** paving 35 mi. streets, sanitary sewers, water sys., site and grounds development, drainage, concrete curbs and gutters for 1,132 acre sub-division development, 4,780 residences, Oak Forest adjoining Garden Oaks on North Shepherd, to Industrial Road Equip. Co., c/o Industrial Addn., **$1,154,-000.** CD 5/31.

Pa., Yerkes—C. D. Messick, Yerkes, residential development, separate contracts. **$205,-000.**

Pa., York—Beverly Hills, Inc., 114 E. Market St., York, residential development, separate contracts, **$220,000.**

Pa., York—A. L. Dise & Son, Loganville, residential development, separate contracts, **$220,000.**

Pa., York—Mrs. Bessie M. Greiner, 728 E. Princess St., residential development, separate contracts. Over **$205,000.**

Pa., York—J. Hoffman, 1401 Old Farm Lane, York, residential development, separate contracts. **$215,000.**

Pa., York—J. C. Hoffman, 1401 Old Farm Lane, York, residential development, separate contracts, **$220,000.**

Pa., York—Wm. Kalish, 32 Broad St., York, residential development, separate contracts. **$210,000.**

Pa., York—R. S. Noonon, Inc., 11 E. Market St., York, 60 residences, separate contracts. Over **$350,000.**

Pa., York—P. E. Zeigler, 114 E. Market St., residential development, separate contracts. Over **$205,000.**

INDUSTRIAL BUILDINGS

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked Probably in July

★**N. Y., Rensselaer**—LABORATORY—Winthrop Chemical Co., Div. of Bayer Co., Riverside Ave., laboratory. **$2,000,000.** W. S. Thompson, 125 E. 46 St., New York, Zone 17, archt. CD 3/11—ENR 4/4.

Bids Asked July 9

N. Y., Riverhead—WAREHOUSE, etc.—L. I. Lighting Co., Old Country Rd., Merrick, warehouse and garage. $125,000. Aymar Embury, 150 E. 61 St., New York 21, archt.

Bids Asked July 15

★**Pa., Meadville** — FOUNDRY — J. Gordon Turnbull, Inc., engr. and archt., 1559 Arcade Bldg., 812 Olive St., St. Louis, Zone 1, 293x735 ft. foundry, 39x93 ft. boiler house, both 1 story, structural steel, brick, rein.-con. fdn., etc.; 2 story, 50x185 ft., brick, structural steel, office for industrial plant, concrete fdn., for National Bearing Div. of American Brake Shoe Co., E. A. Williams, works mgr., 4930 Manchester Ave., St. Louis, 10, Mo., and 230 Park Ave., New York, N. Y. $2,000,000. CD 5/9—ENR 5/30.

Bids Asked

Conn., Willimantic—WAREHOUSE—W. D. Grant Grain Co., Valley St., 1 story, 85 x 220 ft., brick, steel, wood block warehouse. **$65,000.** A. R. Sharpe, Columbia Rd., Middletown, archt.

Me., Portland—PLANT—Gannett Publishing Co., Inc., 177 Federal St., 2 and 7 story, bsmnt., brick, steel, concrete, newspaper publishing plant. $145,000. Lockwood Greene Engr., Inc., 40 Central St., Boston, Mass., engr.

O., Cleveland—BAKERY—Mishaud's Bakery, 9628 Lorain Ave., will not construct 80x100 ft., brick, bakery and restaurant addn. **$100,-000.** Bids 12/29 rejected. Project abandoned. Ward & Conrad, Swetland Bldg., archts. CD 12/21—ENR 12/27.

O., Niles — FOUNDRY — National Bearing Div., American Brake Shoe Co., E. A. Williams, works mgr., 4930 Manchester Ave., St. Louis, 10, Mo., and 230 Park Ave., New York, N. Y., 1 and 2 story, 180x230 ft., structural steel, brick, rein.-con. foundry and 2 story, 60x60 ft. office bldg. J. Gordon Turnbull, Inc., 1559 Arcade Bldg., 8120 Olive St., St. Louis, 1, Mo., engr. and archt. CD 2/21—ENR 2/28.

Pa., Altoona—MILL—Altoona Rayon Weaving Mill, Beale Ave., 1 story, 115x156 ft., brick, tile, steel, rein.-con. weaving mill addn. Shollar & Shollar, Altoona, archts.

★**Tex., Lamesa**—PLANT—Stanolind Oil & Gas Co. & Assoc., Fair Bldg., Fort Worth, natural gasoline mfg. plant, in Slaughter Field of North Permian Basin. $2,500,000.

W. Va., Point Pleasant—SALES AND SERVICE—Mason County Motor Co., Point Pleasant, 1 story, 71x127 ft., brick, steel auto sales and service bldg. $56,000. Frampton & Bowers, 412-11th St., Huntington, archts.

Wis., Watertown—FOUNDRY—Inland Grey Iron Foundry Inc., c/o J. H. Budde, Jr., 9116 Jackson Park Blvd., Wauwatosa, Zone 13, 1 story, 65x150 ft., steel, concrete block foundry, concrete fdn. Steel, to Otto Biefeld Co., Watertown. A. Kuenzi, 202 N. Water St., engr.

SOON LETS CONTRACT

Ill., Chicago—FACTORY—Graham, Anderson, Probst & White, archts., 80 E. Jackson Blvd., soon lets contract 1 story, brick, concrete, steel factory, for Bodin Electrical Co., 2254 W. Ohio St. CO 11/29—ENR 12/6.

LOW BIDDERS

Minn., Hawick—GENERATING UNITS—Rural Co-operative Power Assn. of Maple Lake, B. Johnson, secy., rejected bids June 13, installing 2 Diesel engine generating units, and auxiliary equip. and piping. L. B. **$96,000.** CD 6/3—ENR 6/6.

Pa., Bridgeport (br. Norristown)—WAREHOUSE—M. Trose & Son, Bridgeport, soon lets contract warehouse addin. Over $55,000. Ballinger Co., 105 S. 12 St., Phila., archt.

Pa., Towanda—PLANT—E. I. duPont de Nemours & Co., 10 and Shipley Sts., Wilmington, Del., soon lets contract plant. $275,000.

Tex., San Antonio—PLANT and STORAGE—Kelton Furniture Co., c/o Spillman & Spillman, archts., 10 & 11 Changler Bldg., soon lets contract 2 story, furniture storage and mfg. plant. $65,000.

Mass., Holyoke—PLANT—Process Paper Co., Holyoke, 1 story, brick, steel plant, to P. J. Kennedy & Co., 10 Division St. Est. **$55,000.** Westcott & Mapes, 609 Church St., New Haven, Conn., archts.

Md., Baltimore—MANUFACTURING PLANT—M. J. Kelly, 4020 E. Baltimore St., 1 story, 150 x 150 ft., mfg. plant, concrete fdns. to J. F. Kunkel, 2310 Erdman Ave. **$80,000.**

★**Md., Baltimore**—POWER PLANT—Consolidated Gas Electric Light & Power Co. of Baltimore, Lexington Bldg., addnl. facilities, incl. turbine and boiler room addns., high precipitator structure, etc. at Riverside Power Plant, Turners Falls, near here, separate contracts. Construction, **$2,500,000,** equipment **$4,500,000.**

Mass., North Attleboro—FACTORY—Evans Case Co., North Attleboro, 1 story, 60 x 130 ft., brick, steel monitor factory, to Swanson Constr. Co., 39 County St., Attleboro. Est. **$55,000.**

Mo., Joplin—FACTORY—Junge Cracker Co., 1806 Main St., factory, to Jones Bros. Const Co., 1109 Byers St. approx. **$250,000.**

Mo., St. Louis—FACTORY—Brass & Copper Sales Co., 217 Laclede Ave., Zone 3, 2 story, 67 x 75 ft., brick, concrete factory and office addn., 2811 Laclede Ave., to Wm. H. & Nelson Cunliff Co., 3320 Lindall Blvd., Zone 3. Est. **$55,000** with equip.

Mo., St. Louis—FACTORY—E. E. Marx, Continental Bldg., 3615 Olive St., Zone 3, 1 story, 50 x 100 ft., brick, concrete factory, 118 Marceau St., own forces. F. Winship, 207 N. Kirkwood Rd., Kirkwood, St. Louis, Zone 22, archt.

N. J., Hamilton Square—FACTORY—Foster Yarn Inc., Johnson Ave., Trenton, design and construction 1 story, brick, steel factory, Hamilton Twp., to Belli Co., Broad St. Bank Bldg., Trenton. **$65,000.**

★**O., Plainsville**—PLANT—Glenn L. Martin Co., Middle River, Md., design and construction Marvinol Resin plastic chemical plant on 10 acre site, near here, to Blaw-Knox Constr. Co., Farmers Bank Bldg., Pittsburgh, Pa., **$1,500,-000.** Awarded 6/12. CD 6/21—ENR 6/27, under CA.

Pa., Dormont—GARAGE—Delrose Garage, 2572 W. Liberty Ave., Pittsburgh, 1 story, 110x120 ft., brick, block garage, separate contracts. **$60,000.** W. Schardt, 311 Pitt St., Wilkinsburg, archt.

Pa., Phila.—PLANT—Phila. Notion & Novelty Co., 62 N. 2 St., mfg. and office bldg., to Frank J. Larkin Constr. Co., Inc., 1520 Parrish St., **$100,000.** Awarded 6/20. M. A. Bernhardt, 213 S. Broad St., archt. CD 3/5.

Pa., Phila.—TRAIN SHED—Reading Co., E. L. Gosnell, ch. engr., Reading Terminal, altering train shed and rebuilding Bins 55 and 56, 9 and Berks Sts., to E. Clifford Durell & Son, 3701 N. Broad St., over **$55,000.** Awarded 6/19.

Pa., Phila.—PLANT—A. Di Donato, 2122 S. Rosewoods St., factory, separate contracts. **$60,000.**

Pa., Pottstown—PLANT—Metal Masters Co., 17 N. Washington St., plant, to Mayer Pollock, Cross St., **$80,000.** Awarded 6/19.

Wis., Manitowoc—ROLLING MILL—Aluminum Goods Mfg. Co., 1502 Washington St., 1 story, 102 x 145 ft., steel, brick rolling mill addn., concrete fdn., to Hamann Const. Co., N 8 and Reed Sts. CD 3/19—ENR 3/21.

Alta., Calgary—POWER HOUSE—Canadian Pacific R. R. Co., H. R. Younger, dist. engr., Calgary, 1 story, brick, rein.-con. power house, to Bennett & White Constr. Co., Toronto General Trust Bldg., approx. **$80,000.**

B. C., Vancouver—PLANT—Burns & Co., Ltd., Woodland, Vancouver, packing plant, to Hodgson, King & Marble, 1401 Main St., approx., **$65,000.**

INDUSTRIAL BUILDINGS (Low Bidders Cont'd.)

B. C., Vancouver — PLANT — Dominion Oxygen Co., Ltd., **Clark Dr. & Grant St.**, 2 rein.-con. **bldgs.**, 1 **housing actylene** and carbide producing equip. and other for oxygen producing to **Dawson, Wade & Co., Ltd.**, 775 Clark Dr., **$75,000. Awarded 6/17.** CD 10/5/45—ENR 10/18/45.

N. S., Halifax — WAREHOUSE — The T. Eaton (Maritimes), Ltd., 190 Yonge St., Toronto, Ont., 2 story, 74x160 ft., brick, tile warehouse, to McDonald Constr. Co., Ltd., 76 Sullivan St., approx. **$83,000.** C. St. J. Wilson, Roy Bldg., Barrington St., archt. CD 1/14—ENR 1/24.

Wis., Milwaukee—FACTORY, etc.—Arandell Lithograph Co., 2200 N. 32 St., Zone 8, 1 and 2 story, 90x180ft., steel, brick factory and storage bldg., concrete fdn., to Peters Const. Co., 2640 N. Humboldt Ave., Zone 12. Est. **$80,000.** CD 4/29—ENR 5/16.

Alaska, Anchorage—WAREHOUSE—Northern Commercial Co., Colman Bldg., Seattle 4, Wash., 50x130 ft. warehouse, 120x130 ft. automotive bldg., 75x130 ft. tractor bldg., to Sommers Constr. Co., Juneau. Est. **$300,000.** Bain, Overturf, Turner & Assoc., Hoge Bldg; 2 and Cherry Sts., Seattle 4, Wash., archts.

B. C., Canal—WAREHOUSE and PLANT—Salmon Arm Farmers Exchange, Canal, 122x218 ft., cold storage warehouse and packing plant, to J. Dalrymple, Penticton, **$100,000.** CD 2/7—ENR 2/21.

Ont., Aurora (P.O. Toronto)—FACTORY—Hart Mfg. (Canada), Ltd., 512 King St. E., Toronto, 1 story, 50x300 ft., concrete, steel factory, to The Aurora Bldg. Co., Yonge St., Aurora, approx. **$75,000.**

Ont., Brantford—PLANT—Brantford Roofing Co., 34 Sydenham St., plant, to Schultz Constr. Co., 47 Albion St., approx. **$150,000.** CD 11/29—ENR 12/6.

Ont., Fort Erie—FACTORY—Pratt & Lambert Inc., 75 Tonawanda St., Buffalo, N. Y., U. S. A., general contract 2 story, brick factory bldgs. to Oscar C. Teal & Son, 15 Wintmute St., **$65,000.**

Ont., Goderich—PLANT—Purity Flour Mills, Ltd., 287 Mcpherson St., Toronto, 1 story, bsmnt., 60x140 ft., structural steel, rein.-con. plant addn., to Carter Constr. Co., Ltd., 419 Cherry St., Toronto, approx. **$75,000.**

Ont., Lindsay—FACTORY—American Brakeblock Div. of American Brake Shoe Co., 637 New Center Bldg., Detroit, Mich., 1 story, 80x300 ft., brick, steel factory, to Pigott Constr. Co., Ltd., Pigott Bldg., Hamilton, approx. **$350,000.** CD 5/7—ENR 5/9.

Ont., London—STORAGE—Central Ontario Transportation Ltd., 90 Lisgar St., 1 story, 42x102 ft. brick, steel, storage, to W. H. Cooper Constr. Co., Ltd., Medical Arts Bldg., Hamilton, approx. **$55,000.** G. S. Adamson, 906 Yonge St., Toronto, archt.

Ont., Mount Dennis—FACTORY—More Business Forms, Ltd., Mount Dennis, factory and office addn., to A. W. Robertson, Ltd., 57 Bloor St. W., Toronto, approx. **$65,000.** Mathers & Holdenby, 96 Bloor St. W., Toronto, archts.

Ont., Oakville—FACTORY—Canadian General Electric Co., Ltd., 212 W. King St., Toronto, 1 story, 160x400 ft., structural steel, brick, fluorescent lamps mfg. factory, to Carter Constr. Co., Ltd., 419 Cherry St., Toronto. Est. **$100,000.** Beck & Eadie, 200 W. Bloor St., Toronto, archt.

Ont., Perth—FACTORY—Esmond Mills, Ltd., Perth, structural steel, brick factory, to M. Sullivan & Sons, Ltd., Renfrew, approx. **$175,000.** CD 9/7—ENR 9/13.

Ont., Toronto—WAREHOUSE, etc.—F. C. Baker & Co., 229 Yonge St., warehouse, showroom and office, Davenport Rd., to Teagle & Son, 4 New St., New Toronto, **$55,000.** H. O. Moore, 538 Eglinton Ave. E., archt.

Ont., Toronto—FACTORY—Dominion Gasket & Mfg. Co., Ltd., 347 Sorauren Ave., factory, Scarlett Rd., York Twp., to J. Wolfond, 200 Gordon St., Guelph, approx. **$150,000.** CD 5/29—ENR 6/6.

Ont., Toronto—BOTTLING PLANT, etc.—O'Keefe's Brewing Co., Ltd., 300 Victoria St., bottling plant and office, Victoria St., to E. S. Martin, 16 Saulter St., approx. **$450,000.** CD 4/29—ENR 5/16.

Que., Asbestos—CHANGE HOUSE, etc.—Canadian Johns Manville Co., Ltd., Asbestos, change house and 12 houses, to Foundation Co. of Canada, Ltd., 1538 Sherbrooke St. W., Montreal, approx. **$285,000.** Canadian Domestic Engrg. Co., Ltd., 1440 St. Catherine St. W., Montreal, engr. CD 1/10—ENR 1/17.

Que., Montreal — PLANT — Allan's Beverages, Ltd., 5130 Western Ave., bottling plant, to Foss Constr. Co., Ltd., 660 W. Ste. Catherine St. Est. **$140,000.** G. D. Thompson, 2049 McGill College Ave., archt.

Que., Montreal — BUS GARAGE — Montreal Tramways, 150 W. Craig St., bus garage, to A. Janin & Co., Ltd., 1460 W. Sherbrooke St. Est. **$250,000.** J. Archambault, 150 Craig St., engr. CD 12/20/44—ENR 12/21/44.

Que., Pointe aux Lievres (P.O. Quebec City) —FACTORY—Paul and Jean Champoux, 23 Dorchester St., Quebec City, factory, to A. Deslauriers & Fils, Ltd., 68 Lalemant St., Quebec City, approx. **$150,000.** Amyot & Marchand, 105 Cote de la Montague, Quebec City, archts.

Que., Quebec City—WAREHOUSE, etc.—Martineau Electric Co., 54 St. Joseph St., warehouse and store, Rai and St. Dominique Sts., to Beaudet & Bizier, 77 Charest Blvd., approx. **$60,000.** G. Desmueles, 226 St. John St., archt.

Que., Quebec City—FACTORY—Paul and Jean Champoux, 23 Dorchester St., mfg. snow plows and automotive accessories factory, to Adelard Deslauriers et Sons, Ltd., 63 Lalement St. **$150,000.** Amyot & Marchand, 105 Cote de la Montague archts. CD 1/30—ENR 2/21.

Que., St. Johns — PLANT — Demetre, Sault & Ciriez (Canada), Ltd., 153 Cousins St., 4 story, 25x131 ft., brick, rein.-con. plant exten., to J. P. Trahan, 178 Mercier St., approx. **$60,000.**

Que., St. Johns—PLANT—J. P. Trahan, 178 Mercier St., plant addn., to Demetre Sault & Ciriez, 159 Cousins St., approx. **$60,000.**

Que., St. Hyacinthe—MILL—G. Amedee Nicolas, La Providence, 1 story, 140x150 ft., concrete, steel, brick spinning mill, Sesaulniers St., to C. Gilbert, Lafontains St., **$100,000.** CD 2/18—ENR 3/7.

Que., Rimouski—GARAGE—La Compagnie de Pouvoir du Bas, St. Laurent de Rimouski, garage, St. Jean St., to Zenon Ouellet, 721 'Eveche St., **$50,000.** M. Lanouette, c/o owner, archt.

Que., Rock Island—FACTORY—Spencer Supports (Canada) Ltd., J. D. Ferguson, mgr., factory exten., to Stewart Constr. Co., Ltd., 7 Dufferin Ave., Sherbrooke, approx. $125,000. CD 6/5—ENR 6/20.

Que., Ville La Salle—PLANT—Distillers Corp., Ltd., 1430 Peel St., Montreal, bottling plant, to A. F. Byers Constr. Co., Ltd., 1226 University St., Montreal, approx. **$200,000.** B. R. Perry, 680 Sherbrooke St. W. Montreal, engr.

CONTRACTS AWARDED

Calif., Los Angeles — FACTORY — Johns-Manville, 816 W. 5 St., 50x700 ft., steel frame, transite pipe factory addn., 15x80 ft. warehouse, 800 ft. craneway, 223 St. and Alameda St., Watson, to R. E. McKee, 4700 San Fernando Rd. Approx. **$300,000.** CD 11/15—ENR 11/22.

Calif., Los Angeles—FACTORY—Fried Camera Co., 910 N. Orange Dr., 1 and part 2 story, rein.-con. block factory, 1022 N. La Brea Ave., to Buttress & McClellan, 1013 E. 8 St. **$60,000.** J. MacDonald, 1013 E. 8 St., archt.

Calif., Los Angeles—FACTORY—West Coast Luggage Co., 914 S. Flower St., 1 and part 2 story, 75x150 ft., frame, stucco factory, 136 San Fernando Rd., to G. W. Kaplan Constr. Co., 249 W. 48 St. **$62,646.** CD 3/28—ENR 4/18.

Calif., Los Angeles—FACTORY—Schraeder Electronic & Coil Corp., 5732 Duarte St., frame, stucco factory addn., 5718 Duarte Ave., own forces, **$60,000.** Hunter & Thomas, 2060 Saturn Ave., Huntington Park, archts.

Calif., Vernon—PLANT—Haas, Baruch Co., 421 E. 2 St., Los Angeles, 1 and part 3 story, rein.-con. food processing plant, 4700 Boyle Ave., to Baruch Corp., 625 S. Olive St., Los Angeles. **$175,000.** A. C. Martin, 333 S. Beaudry St., Los Angeles, archt.

Conn., Danbury—FACTORY—Mutual Rough Hat Co., Meeker Lane, 1 and 2 story, 65 x 185 ft., brick, steel factory, Meeker Lane, to Luke Sweeney & Sons, Inc., 15 Bates Pl. Est. **$80,000.** P. N. Sunderland, 81 West St., archt.

Conn., Greenwich—AUTO SALES, etc.—Corwin Wickersham, Pecksland Rd., brick, steel, concrete auto sales and service, Riverside Sect, to W. Barbaresi, Mount Vernon, N. Y. Est. **$60,000.** CD 5/28—ENR 5/30.

Conn., Willimantic—FACTORY—New England Pants Co., North St., 1 story, 55 x 180 ft., 2 story, 20 x 40 ft., brick, steel factory, Ash St., to J. Nasin, High St. Est. **$60,000.** A. R. Sharpe, Columbia Rd., Middletown, archt.

Fla., Forest City—PLANT—Fosgate Growers Corp., Forest City, 150x160 ft., concrete, steel packing plant addn., to Stevens & Sipple, Orlando. Est. **$100,000.** CD 5/17—ENR 5/23.

Fla., Tampa—WAREHOUSE, etc.—Major Appliances, Inc., 209 S. Franklin Ave., concrete, steel warehouse and office, to Gates Constr. Co., Stovall Professional Bldg., **$100,000.**

Fla., Tildenville — PLANT — South Lake Apopka Citrus Growers, Tildenville, 130x160 ft., concrete, steel, packing plant addn., to Stevens & Sipple, Orlando. Est. **$130,000.** CD 5/17—ENR 5/23.

Ga., Chamblee—FACTORY—U. S. Envelope Co., Chamblee, 1 story, 110x260 ft., concrete block, steel factory, to Central Contracting Co., First Natl. Bank Bldg., Atlanta. Est. **$300,000.** Robert & Co., Bona Allen Bldg., Atlanta, engrs. CD 3/7—ENR 4/4.

Ga., Rossville — PLANT — Happy Valley Farms, Inc., Rossville, 1 story, 110x150 ft., brick, concrete, steel dairy plant, to Batson-Cook Co., West Point. **$175,000.**

Ill., Chicago—SALES— B. F. Goodrich Co., 333 W. Lake St., 1 story, 150x175 ft., brick, concrete, steel sales bldg., to E. E. Hartrich & Son, 141 W. Jackson St. Est. **$175,000.** CD 3/22—ENR 3/28, under Commercial Bldgs.

N. Y., Buffalo—OIL STATION—New York Central System, S. E. Armstrong, ch. engr., 466 Lexington Ave., New York, Zone 17, 200,000 gal. tank, oil station, near Curtis St. Owner builds. **$200,000.**

★ **O., Brook Park**—POWER HOUSE, etc.—General Motors Corp., Chevrolet Motors Div., General Motors Bldg., Detroit, Mich., power house, factory, administration bldgs., to Darin & Armstrong, Inc., 2041 Fenkel St., Detroit, Mich. Est. **$3,000,000.** Bids 6/13, awarded 6/25.

O., Bucyrus—FACTORY—Swan Rubber Co., Bucyrus, 4 story, bsmnt., 100 x 175 ft., brick, steel, concrete rubber factory addn., to H. K. Ferguson Co., Hanna Bldg., Clevealnd, **$300,000.** J. Edgar Outcald, Olentangy River Rd., Columbus, archts.

★ **O., Parma**—ASSEMBLY PLANT—General Motors Co., Chevrolet Motors Div., General Motors Bldg., Detroit, Mich., brick, steel, concrete assembly plant, pressed steel mfg. bldg., at Brook Park and Stumpf Roads, to Darin & Armstrong, Inc., 2041 Fenkel St., Detroit, Mich. Est. **$5,000,000.** Bids 6/13, awarded 6/25. CD 5/27—ENR 5/30.

R. I., Bristol—FACTORY—Carr Manufacturing Corp., Franklin St., 1 story, brick, concrete factory, Buttonwood St., to Henry M. Soule Co., 110 Armistice Blvd., Pawtucket, **$70,000.** CD 24—ENR 5/30.

Tex., Fort Worth—FACTORY—A.M.S. Corp., 509 Houston St., remodeling brick, concrete factory, to H. B. Friedman, 1510 W. 10 St., **$100,000.** Wilson & Patterson, Majestic Bldg., archts.

Tex., Waco — BAKERY — Southern Maid Bakeries, 2000 Franklin St., Waco, 1 story, concrete, masonry Bakery Units 1 and 2, to H. Harrison, Waco, **$175,000.** Easterwood & Easterwood, Service Mutual Bldg., archts. CD 8/23—ENR 9/6.

★ **Wis., Milwaukee**—STOCK HOUSE—Miller Brewing Co., 4002 W. State St., Zone 8, 6 story, 96 x 158 ft., rein.-con. Stock House F, to Selzer-Arnst Co., 6222 W. State St., Wauwatosa, Zone 13. Est. **$900,000.** CD 3/22—ENR 5/2.

UNCLASSIFIED

Construction Reports received since this section went to press will be found in Last Minute Construction Reports.

BIDS ASKED

Bids Asked July 9

Ill., Edwardsville—WHITEWAY SYSTEM—City Clerk, City Hall, whiteway sys. $70,000. Ferris & Hamig, 122 N. Seventh St., St. Louis, Mo., engrs. CD 4/5—ENR 4/18.

Bids Asked About July 15

Mo., St. Louis—AIRLINER PARKING—City, c/o M. M. Kinsey, pres., Bd. Pub. Service, 304 City Hall, Zone 3, 10 circular concrete parking stands for airliners off flight apron at Lambert-St. Louis Municipal Airport, concrete walkway. **$35,000-$40,000.** G. Brown, 317 City Hall, Zone 3, ch. engr.

Texas—RURAL ELECTRIC LINES—Upshur Co. Co-operative, c/o Mrs. Delta Scales, mgr., Gilmer, 225 mi. rural electric lines, Upshur Co. $230,000. Freese & Nichols, 407 Danciger Bldg., Fort Worth, engr. CD 5/23—ENR 6/13.

Bids Asked July 19

O., Akron—AIRPORT—Comrs. Summit Co., Akron, structural steel work on founds. of Akron-Canton-Massillon Airport Terminal Bldg., Green Twp. Plans deposit $10. M. M. Konarski, archt., and F. W. Stafford, engr., both 711 United Bldg. CD 1/9/45—ENR 1/25/45.

Bids Asked About August 13

★ **Mo., St. Louis**—AIRPORT—City, M. M. Kinsey, pres. Bd. Pub. Service, 304 City Hall, Zone 3, 5,000 ft. rein.-con. runway at Lambert-St. Louis Municipal Airport, St. Louis Co. $1,250,000.

Bids Asked July 25

†Arizona—TRANSMISSION LINE — Bureau Reclamation, Denver, Colo., Davis Dam-Kingman, 69 kva. transmission line, western part of Arizona, Davis Dam Proj., Arizona-Nevada. Spec. 1397.

Bids Asked

Mass., Pittsfield—STADIUM—City, F. D. Retallick, comr., concrete, steel baseball and football stadium, Wahconah Park. $55,000. J. M. Vance, 28 North St., archt. CD 4/2—ENR 4/18.

LOW BIDDERS

†Calif., Moffett Field—YAW SYSTEM—National Advisory Com. for Aeronautics, Ames Aeronautical Laboratory, fabrication and installing aircraft yaw sys. in 40x80 ft. wind tunnel, from Consolidated Steel Corp., Box 6880, Los Angeles, **$131,730.**

★ **†Calif., San Francisco**—PIERS—Yards & Docks Annex, Navy Dpt., Arlington, Va., June 25, 2 pile supported concrete piers, steel cellular quaywall, mechanical and electrical services on piers for berthing facilities for in-

UNCLASSIFIED (Low Bidders, Cont'd.) active vessels, Spec. 17852, NOY 13734, from B. C. Gerwick, Inc., 112 Market St. (1) **$4,251,198.**

†Kan., Pittsburg — AIRPORT IMPROVEMENTS—Civil Aeronautics Admin., 414 E 12 St., Kansas City, Mo., imprv. Atchinson Airport, Ser. 5P-L-16-260, from Freito Constr. Co., Pittsburg. **$201,524.** CD 3/4—ENR 3/7.

†Md., Patuxent River (br. Wash., D. C.)—AIR CENTER QUARTERS—Yards & Docks, Annex, Navy Dpt., Arlington, Va., received no bids June 21, quarters for married officers and enlisted men, NOY 13748. CD 6/12.

†Missouri—DIKES, etc.—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., pile dikes and revetment adjacent to Missouri River at Quindaro to Hills Bends, 23-028-46-144, from W. A. Lynn Constr. Co., Standard Oil Bldg., Omaha, Neb. **$252,883.**

†N. J., Bayonne—BALLARDS—Yards & Docks, Annex, Navy Dpt., Arlington, Va., June 13, ballards, from Merritt-Chapman & Scott Corp., 17 Battery Pl., New York 4, N. Y. (1) **$189,086** (2) **$176,900.**

N. Y., Brooklyn—SUBWAY ENTRANCES—Bd. Transportation, 250 Hudson St., New York, June 14, addnl. entrances to Flatbush Ave. Station Route 29, Sect. 2, from Frederick L. Cranford, Inc., 149 Remsen St., **$58,067.**

†O., Columbus—AIR BASE BLDGS.—U. S. Eng., P.O. Box 1234, Cincinnati, June 19, converting facilities to family quarters, Lockbourne Army Air Base, Inv. 33-015-46-76, from H. M. Boyajohn & Associates, 990 W. 3 Ave., Zone 8. **$464,700.** Est. $491,997. CD 6/13—ENR 6/6.

†O., LaCarne—TANKS—U. S. Eng., P.O. Box 1234, Cincinnati, Zone 1, June 24, tanks for ordnance vehicle storage, Erie Ordnance Depot, Ser. 33-015-46-89, from R. J. Au, 524 Bowman St., **$127,281.** CD 6/1.

†Okla., Fort Sill—AIRPORT IMPRVS.—U. S. Eng., 416 Wright Bldg., Tulsa, 2, airport imprvs., incl. grading, drainage, lighting, accessory work, from Standard Paving Co., 2119 E. 11 St., Tulsa. **$464,110.** Est. $493,919. CD 6/5.

†R. I., Quonset Point—LIGHT SYSTEM—Yards & Docks Annex, Navy Dpt., Arlington, Va., rejected bids June 13, light sys., at Seadrome, Spec. 17792. CD 6/3—ENR 6/6.

★**Tex., San Antonio** — UNDERGROUND AUTO PARKING—City, G. B. Mauermann, mayor, June 20, underground auto parking garage, Travis Park, from H. B. Zachry Co., Transit Tower Bldg., approx. **$1,500,000.** T. Coghill, City Hall, consult. engr. CD 6/10—ENR 6/13.

Wis., Milwaukee—AIRPORT DRAINAGE—Milwaukee Co., c/o Court House, June 20, drainage sys. at General Mitchell Airport, from Geo. W. Rauch, 2362 N. 25 St., Zone 6, **$202,655.** CD 6/4—ENR 6/6.

CONTRACTS AWARDED

Calif., Concord—ATHLETIC FACILITIES—Mt. Diablo Union High School, Seal Bluff Rd., athletic facilities, grading for football field, paved play area, turf field, walks, roads, night lighting sys., tennis courts, to S. J. Amoroso Constr. Co., 2100 Oakdale Av., San Francisco, **$122,260.** Bids 6/24.

†Calif., Oakland—DOLPHINS, MOORINGS—Yards & Docks Annex, Navy Dpt., Arlington, Va., 8 pile dolphins, moorings in San Leandro Bay, Spec. 18684, to Duncanson-Harrelson Co., 1404 DeYoung Bldg., San Francisco. **$44,481.**

Mass., Brookline—CURLING RINK—Brookline Country Club, Brookline, brick, concrete curling rink, to Turner Constr. Co., 38 Newbury St., Boston. Est. **$50,000.** W. Chandler Bowditch, 10 State St., Boston, archt.

Mass., Boston—WHARF—City, City Hall, constructing wharf, Long Island, to M & R Const. Co., 139 Coleridge St., East Boston, **$107,000.** Bids 6/12, awarded 6/24. CD 5/31—ENR 6/6.

Mass., Haverhill—RADIO STATION—Haverhill Gazette Co., 179 Merrimack St., radio station, Silver Hill, Mt. Washington Sect., to W. Starbird, Groveland St. Est. **$100,000.** CD 12/17—ENR 12/27.

Me., Searsport—DOCK—C. H. Sprague & Son Co., 10 Post Office Square, Boston, Mass., concrete, timber dock, facilities, to Seaboard Constr. Co., 201 Marginal St., Chelsea, Mass. **$93,600.** Est. $90,000.

Minnesota — TRANSMISSION LINE — Traverse Electric Co-operative, Wheaton, 251 mi. rural electric transmission lines, Traverse Co., to Swift Electric Co., Wheaton. **$54,967.** Bids 5/24 CD 5/17, under Wheaton—ENR 12/13, under Minnesota.

Minn., Anoka—RURAL ELECTRIC TRANSMISSSION LINES—Anoka County Co-operative Light & Power Assn., Anoka, about 236 mi. rural electric transmission lines as exten. to sys., to Franzen Bros., Palisade, **$264,918.** Ellerbe & Co., 502 First National Bank Bldg., St. Paul, engrs. CD 11/12—ENR 12/13.

Minn., Virginia—TRANSMISSION LINE—Northern Electric Co., E. H. Sande, secy., 272 mi. rural electric transmission lines, St. Louis Co., to Hallett Constr. Co., Crosby, **$272,070.** Bids 5/14. CD 5/20—ENR 5/23.

†N. Y., West Point—Athletic Field—U. S. Eng., 120 Wall St., New York, Zone 5, athletic field, U. S. Military Academy, to Dinger Constr. Co., New Springville, **$88,841.** Bids 6/13, awarded 6/17. CD 6/6.

★**O., Akron**—AIRPORT—James M. W. Chamberlain, Brimfield Rd., airport, with 5,000 ft. runway, West Akron, to Chamberlain Engrg. Ltd., Brimfield Rd. Est. **$700,000.**

O., Cleveland—GRANDSTANDS, etc.—Cleveland National Air Races, c/o Chamber of Commerce, Union Commerce Bldg., Major J. Berry, airport comr., temporary metal and wooden grandstand and administration bldg., for National Air Races at Cleveland Municipal Airport, to J. Baesel, 584 Front St., Berea, **$175,000.** M. MacMillin, 10525 Carnegie Ave., archt.

★**†Ore., Astoria** — ELECTRICAL and MECHANICAL SERVICES—Yards & Docks Annex, Navy Dpt., Arlington, Va., electrical and mechanical services for inactive fleet berthing facilities, Tongue Point Naval Air Station, to S. Bergesen, Route 10, Box 971, Tacoma, Wash. **$1,570,000.** Bids 6/14, awarded 6/20. CD 6/24—ENR 6/27, under LB.

Pa., Coatesville—RUNWAY—Lukens Steel Co., Coatesville, steel crane runway. Owner builds. **$40,000.**

†Pa., Phila. — ELECTRIC FACILITIES — Yards & Docks Annex, Navy Dpt., Arlington, Va., electric facilities, Naval Shipyard, to Howard P. Foley, Inc., 1630 Pine St. **$47,860.** CD 5/16—ENR 5/23.

Tenn., Elizabethton—ATHLETIC STADIUM—City, concrete, steel athletic stadium, to Tayler Constr. Co., Elizabethton. Est. **$50,000.**

Tenn., Knoxville—PARK DEVELOPMENT—Knox Co., c/o W. C. McCammon, park development, swimming pool, boat house, cabins, 20,000 gal. concrete reservoir, day labor. **$50,000.** CD 3/6/45—ENR 3/22/45.

Tex., Andrews—OIL PIPELINE—Humble Pipe Line Co., Humble Bldg., Houston, replacing 9½ mi. 6 in. crude oil pipeline with 8 in., own forces. Approx. **$70,000.**

Tex., Carthage—NATURAL GAS PIPELINE—Arkansas Louisiana Gas Co., Slattery Bldg., Shreveport, La., natural gas pipeline gathering sys., to Anderson Bros., Natl. Bank Commerce Bldg., Tulsa, Okla., approx. **$110,000.**

†Tex., Fort Worth—STORAGE—U. S. Eng., Clifford Ave., constructing storage at Quartermasters Depot, to Fort Worth Structural Steel Co., 2400 W. 7 St., **$45,000.**

Tex., Houston—ICE SKATING RINK—City, ice skating rink in Coliseum Bldg., to Knutson Constr. Co., 2233 Commerce Bldg., **$169,770.** G. L. Fugate, city engr.

Tex., Houston—UNDERGROUND CABLE ELECTRIC LIGHTING SYSTEM—Houston Lighting & Power Co., 1016 Walker St., underground cable electric lighting sys. for Interurban Blvd. area, force account. Approx. **$80,000.**

Tex., Wichita Falls — RADIO STATION—Times Publishing Co., Wichita Falls, FM radio station, incl. 500 ft. steel tower, force account. Approx. **$40,000.**

Wis., Milwaukee — TRACK SYSTEM — Bd. Harbor Comrs., Milwaukee, exten. track sys. on Jones Island, to Walter H. Knapp, Inc., 3202 N. 37 St., Zone 10. **$83,260.** Bids 6/11, awarded 6/13. CD 6/3—ENR 6/6.

†C. Z. Coco Solo—ELECTRICAL SERVICES—Yards & Dock Annex, Navy Dpt., Arlington, Va., electrical services, Naval Air Station, NOY 13442, to Williams Bros. Corp. of Panama, P. O. Box 5006, Cocoli, **$40,063.**

†Territory of Hawaii—AVIATION FACILITIES, etc.—Yards & Docks Annex, Navy Dpt., Arlington, Va., completing NOY 8511, aviation and dredging facilities, 14 Naval Dist., NOY 13699, to Hawaiian Dredging Co., Ltd., Box 3468, Honolulu.

Ont., Gore Bay—AIRPORT—Trans Canada Airlines, Montreal, Que., airfield, to King Paving Co., Ltd., Oakville. **$346,000.** Bids 6/10. CD 5/31.

Que., Montreal — ELECTRIC LIGHTING UNITS—Municipality, installing 3,450 electric lighting units throughout city, to Northern Electric Co., Ltd., Shearer St., **$53,311** and Canadian General Electric Co., Ltd., 1000 Beaver Hall Hill, **$78,930.** CD 5/24.

Que., Ste. Felicite—WHARF—Dpt. P. Wks., Ottawa, Ont., wharf repairs, to A. Tibeault, Matane. **$54,000.** K. M. Cameron, c/o owners, engr. CD 6/4—ENR 6/6.

†C. Z., Coco Solo—SPRINKLER SYSTEM—Yards & Docks Annex, Navy Dpt., Arlington, Va., sprinkler sys., Naval Air Station, NOY 13563, to Isthmian Constructors, Inc., Box 682, Acon. **$197,700.**

†Puerto Rico, San Juan—STEAM DISTRIBUTION REPLACEMENT, etc.—Yards & Docks Annex, Navy Dpt., Arlington, Va., steam distr. replacement and alteration, Naval Air Station, NOY 13477, to Raul Buxeda, Box 3011, San Juan, **$132,400.**

PROPOSED PROJECTS

Including class of projects previously listed as *postwar*

PUBLIC BUILDINGS

PROPOSED WORK

Ala., Anniston—City, plans by Long & Pauley, Martin Bldg., Birmingham, 4 story, 42 x 132 ft., brick, steel, concrete, doctors bldg. **$200,000.** Ladd Engrg., Fort Payne, engrs.

★**Ala., Montgomery**—City, by Clyde Pearson, First Natl. Bank Bldg., 250 bed hospital. **$1,511,000.**

Ark., West Memphis—West Memphis School Bd., plans by Furbinger & Erhman, Union Planter Bank Bldg., Memphis, Tenn., school, **$250,000.**

Ark., Wynne—City, c/o S. Greenfield, factory. **$85,000.** Woracek Shoe Co., lessee.

Calif., Delano—Delano Joint Union High School, plans completed by F. Wynkoop, Stoner Bldg., science bldg., academic, transportation and shop bldgs. **$285,000.** Financing provided.

★**†Calif., Fresno** — Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., 250-bed hospital. **$2,634,676.** CD 9/4—ENR 9/6.

★**Calif., Grossmont**—Grossmont Union High School Dist. plans by Kistner & Curtis, 408 Spreckles Bldg., San Diego, auditorium, library, shop bldg., gymnasium, bleachers, swimming pool, remodeling school. **$800,000.** Financing not provided.

Calif., LaCanada — LaCanada Elementary School Dist., 1231 Foothill Blvd., plans by H. L. Gogerty Organization, 3123 W 8 St., Los Angeles, school addns. **$250,000.**

Calif., Lincoln—Lincoln Union High School Dist., Lincoln, plans by G. Stafford, Forum Bldg., Sacramento, school, incl. classroom bldgs., gymnasium, auditorium, etc. **$240,000.** Bond election May 3.

Calif., Monterey — Monterey Union High School Dist., Box 1031, plans by R. Stanton, addn., agricultural bldg., etc. **$327,300.** CD 4/11.

★**Calif., Monterey** — Monterey Co., Court House, Salinas, plans by R. Stanton, Pebble Beach, heating plant, laundry, **$250,000;** Class A isolation bldg., **$200,000;** Class A maternity unit at County Hospital, **$250,000.**

Calif., Morgan Hill—Live Oak Union High School Dist. plans by R. Stanton, Pebble Beach, 3 schools, administration, classroom addn., agricultural bldg., etc. **$327,300.** CD 4/11.

★**Calif., National City**—Sweetwater Union High School Dist., plans completed by Kistner, Curtis & Wright, 408 Spreckles Bldg., San Diego, 5 schools, **$880,000;** high school addn. **$225,000.** Financing not provided.

★**Calif., Oakland**—City, City Hall, plans by Miller & Warnecke, Financial Center Bldg., main library, 4 branches, **$1,763,000.** CD 5/16—ENR 5/31.

★**Calif., Pittsburg** — Pittsburg Unified School Dist., School St., plans by C. F. Dean, California State Life Bldg., Sacramento, school addn. **$850,000.** Bond election May 17.

★**Calif., Rosemead**—El Monte Union High School Dist., plans by Kistner, Curtis & Wright, Architects Bldg., Los Angeles, 2 story auditorium, library, administration bldg., shops, gymnasium, 30 room school, Encinita and Mission Rd. **$500,000.**

Calif., Sacramento—City, City Hall, administration bldg. at municipal airport. **$150,000.** F. J. Klaus, City Hall, city engr.

Calif., San Bruno — City, City Hall, defeated bonds, civic center. **$300,000.** CD 3/14—ENR 4/4.

★**Calif., San Francisco** — Housing Authority of City and San Francisco Co., 525 Market St., converting Naval Receiving Hospital at Crocker-Amazon playground into 550 four-room apartments; Wave Barracks at Balboa Park into 120 four-room units; Hunters Point dormitories into 718 two-room units, other barracks. **$5,700,000.**

Calif., San Francisco—Polyclinic Hospital, 1535 Jackson St., hospital. **$400,000.**

Calif., San Jose — City, City Hall, plans under way, **$350,000** bond election May 6, fire stations. H. J. Flannery, city engr. CD 10/24—ENR 11/15.

★**Calif., San Mateo**—San Mateo Elementary School Dist., 120 N. Ellsworth Ave., plans by E. J. Kump Co., 251 Kearny St., San Francisco, 2 wing school addn., at Borel School, **$254,000;** 1 wing containing 6 classrooms, cafeteria, etc., at Beresford Park School, **$159,000;** 2 classroom wings and administration unit at Sunnybrae School, **$254,000.** CD 3/5—ENR 3/7.

Calif., Santa Rosa—City, plans by C. Caulkins, Rosenberg Bldg., veterans memorial bldg. **$250,000.**

†Calif., Sawtelle—Veterans Admin., Sawtelle, mess hall. **$200,000.**

Calif., Temple City—S. Santa Anita School Dist., 2048 E. Langdon Ave., plans by Marsh, Smith & Powell, 816 W. 5 St., Los Angeles, school at Broadway and Cloverly Ave. **$200,000.**

Calif., Tulare—Tulare Hospital Dist., Landsay Hy., 80 bed hospital. **$480,000.**

★**Calif., Watsonville**—Watsonville School Bd., Watsonville, plans by Robert Stanton, Pebble Beach, agricultural and shop bldg. for high school, **$300,000**; school addn., **$240,000.**

★**Calif., West Los Angeles**—University of Calif., West Los Angeles, preliminary plans completed by Hunt & Chambers, 124 W. 4 St., Los Angeles, two 3 story, Class A, concrete dormitory bldgs. **$750,000.**

★**Calif., Whittier**—City, City Hall, plans by W. H. Harrison, 816 W. 5 St., Los Angeles, addnl. units, Whittier Union High School. **$1,250,000.**

Calif., Woodland — Woodland School Dist., Woodland, plans by Dragon & Schmidts, 2068 Allston Way, Berkeley, Beamer & Dingle grammar school addns. **$266,000.** $175,000 bond election May 28.

Colo., Arvada—Bd. Educ., Arvada, plans 50% completed by S. A. Axten, Cooper Bldg., Denver, high school addn., **$125,000**; school. **$100,000.**

★**Colo., Denver**—University of Denver, University Pk. Campus, plans by Smith, Hegner & Moore, Railway Exchange Bldg., and G. M. Musick, 1000 Patterson Bldg., assoc. archts. college bldg. **$1,000,000.**

★**Conn., Bridgeport**—State of Connecticut, R. E. Baldwin, gov., State Capitol, Hartford, plans by Fletcher Thompson, Inc., 211 State St., brick, steel, stone armory. **$750,000-$1,000,000.**

†**Conn., Rocky Hill**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., plans completed grading, site imprvs., housing, Conn. 6126.

★**Fla., Clearwater**—Pinellas Co. Comrs., plans by R. Wakeling, Clearwater, 7 story courthouse top addn. **$500,000.**

Fla., Jacksonville—City, G. A. Pierce, chn. P. Utilities, modernizing, rehabilitating electric plant. **$229,400.** Reynolds, Smith & Hills, 10 S. Laura St., consult. engrs. CD 1/5/45—ENR 1/25/45.

Ga., Bremen—Bremen School Sys., c/o H. A. Jones, supt., plans by F. M. Daves, 774 Spring St. N. W., Atlanta, high school, **$300,000.** CD 10/12—ENR 11/8.

★**Ga., Griffin**—Griffin Housing Auth., Griffin, 300 houses. **$1,350,000.** Financing provided.

★**Ill., East St. Louis**—East St. Louis School Dist., c/o Dr. R. L. Campbell, pres. Bd. Educ., E. Barmann, chn. Building Com., 240 N. 6 St., voted bonds Negro High School, **$670,000**; 16-room Negro school **$330,000**; Senior High School Vocational bldg. **$300,000.** CD 3/28—ENR 4/18.

Ill., Evanston—City, J. L. Rose, comr. P. Wks., plans by Perkins & Will, 309 W. Jackson Blvd., Chicago, 2 story brick, concrete, steel Negro community center, incl. gym, club rooms, etc. **$300,000.** CD 4/12.

Ill., Fairfield—Fairfield Community High School Dist. 225, Wayne Co., high school addn. to provide gymnasium, bandroom, cafeteria, kitchen, home economics space, laboratories, farm shop and machine shop. **$237,000.**

Ill., Granite City—Granite City, C.H.S. Dist. 149, school. **$275,000.**

Ill., Henry—Henty T.H.S. Dist 20, school. **$230,500.**

★**Ill., Hinsdale**—Hinsdale T.H.S. Dist. 86, school. **$1,000,000.**

★**Ill., Kewanee**—Kewanee S. Dist. 51, school. **$800,000.**

Ill., Lincoln — Lincoln C.H.S. Dist. 404, school. **$425,000.**

★**Ill., Lyons**—Lyons T.H.S. Dist. 202, school. **$750,000.**

★**Ill., Riverside**—School Dist. 208, I. E. Habich, supt., Riverside, plans by Burnham & Hammond, 160 N. La Salle St., Chicago, 2 story, brick, concrete, stone, Riverside-Brookfield School. **$500,000.** CD 4/11.

Ill., Round Lake—Round Lake Con. S. Dist. 43, school. **$800,000.**

★**Ill., Sterling**—Sterling T.H.S. Dist. 300, school. **$925,850.**

★**Ill., Thornton**—Thornton T.H.S. Dist. 205, school. **$685,000.**

Ind., Clinton—Bd. Comrs. Vermillion Co., I. Church, aud., Court House, Newport, and Bd. Hospital Trustees, J. Guerri, chn., 325 S. Main St., plans by Weber & Thomas, Star Bldg., Terre Haute, 2 story, bsmnt., brick, stone rein.-con., structural steel county hospital addn. **$150,000.**

Ind., Columbus—City, J. E. Avery, pres., School Bd., vocational training units. **$150,000**; high school, **$250,000.**

Ind., Columbus — Comrs. Bartholomew Co., J. Allbright, aud., Court House, and County Hospital Bd. Trustees, preliminary plans by N. H. Hill, 525 Ind. Trust Bldg., Indianapolis, 2 story, bsmnt., brick, stone, structural steel hospital addn. **$250,000.** CD 4/15.

Ind., Fort Wayne—Bd. Comrs. Allen Co., J. A. Brewer, aud., Court House, plans by Pohlmeyer & Pohlmeyer, 262 Central Bldg., 2 story, bsmnt. Boy's Detention Home, containing dormitory, class rooms, vocational training dpt., kitchen, dining hall, central steam heating plant, laundry, State Rd. 3. **$150,000.**

Ind., Huntertown—Bd. Comrs. Allen Co., J. A. Brewer, aud., Court House, Fort Wayne, preliminary plans by A. M. Strauss, 415 Cal-Wayne Bldg., Fort Wayne, 1 and 2 story, brick, rein.-con., structural steel tuberculosis sanatorium, **$481,000.**

Ind., Wolcottville—C. Zook, Twp. Trustee, Wolcottville, plans by Pohlmeyer & Pohlmeyer, 262 Central Bldg., Fort Wayne, 2 story, twp. high and grade school. **$175,000.**

Ia., Ames—Iowa State Bd. Educ., 1007 Des Moines St., Des Moines, plans by Dougher, Rich & Woodburn, Old Colony Bldg., Des Moines, women's dormitory, Iowa State College. **$200,000.** Financing provided.

★**Ia., Ames**—Iowa State Bd. Educ., D. Dancer, secy., State House, Des Moines, remodeling, enlarging power and heating plant at Iowa State College of Agriculture and Mechanic Arts. **$900,000.** Financing provided. Brown Eng. Co., Valley Bank Bldg., Des Moines, consult. engr.

Ia., Cedar Falls—State Bd. Educ., D. Dancer, secy., State House, Des Moines, plans by Nemmers, Clark & Spooner, Masonic Temple, Des Moines, men's dormitory at Iowa State Teachers College. **$800,000.** Financing provided.

Kan., Clay Center—City, J. T. McCulloch, mayor, voted **$150,000** bonds, city hospital addn. Overend & Boucher, Brown Bldg., Wichita, archts. CD 3/13—ENR 4/4.

Kan., Coffeyville — Bd. Educ., M. Ostenberg, supt., Coffeyville, plans by Thos. W. Williamson & Co., Natl. Bank of Topeka Bldg., Topeka, McKinley School. **$274,400.** Financing not provided.

★**Kan., Great Bend**—Bd. Educ., plans by L. Schmidt, 1832 E. 2 St., Wichita, 8 room school and high school. **$667,000** bonds voted.

Kan., Lawrence—City, voted bonds, city bldg. **$325,000.** L. H. Spencer, Central Bldg., Topeka, archt. CD 10/24—ENR 11/15.

Kan., Osawatomie—City, A. J. Lockhart, mayor, voted **$235,000** bonds municipal bldg. Burns & McDonnel Engineering Co., 107 N. Linwood Blvd., Kansas City, Mo., consult. engrs. CD 3/12—ENR 4/4.

Kan., Wakeeney — Trego Community High School, Wakeeney, Nadine Ellis, chn., plans by J. W. Radotinsky, Commercial Bank Bldg., Kansas City, Kan., high school. **$393,200.** Financing not provided. CD 4/12.

★**Ky., Covington**—Kenton Co., juvenile home for boys, incl. classrooms, shops, gymnasium, library, music room, offices, dormitories, and cottages, **$462,169**; court house, jail and administrative offices, **$981,946.**

★**Ky., Lexington**—Bd. Trustees University of Kentucky, Lexington, fine arts building, incl. theater, stage, departments of music, drama and art, art museum, offices, library and other rooms and facilities, **$1,250,000.**

★**Ky., Louisville**—Jefferson Co., courthouse annex, incl. administrative office and auxiliary rooms, also altering court house, **$519,500.**

Ky., Pikeville—Pike Co., storage garage for school buses, shops, stockroom, offices and storage space. **$66,650.**

★†**La., Shreveport** — Veterans Admin., Vermont Ave. between H and I Sts., N.W., Wash. 25, D. C., 450-bed hospital. **$3,715,361.** CD 7/13—ENR 7/26.

★**Md., Hagerstown**—Washington Co. Bd. Educ., 1 story school, **$169,000**; 2 story, brick South Potomac Junior High School addn., **$189,000**; 1 story school, **$174,000.**

Mass., Brookline—Town, plans by Sturgis Assoc., Inc., 120 Boylston St., Boston, fire station headquarters, 340 Washington St. **$400,000.** Financing not provided.

★**Mass., Greenfield**—Franklin County Hospital, High St., plans by James H. Ritchie & Associates, 38 Newbury St., Boston, 3 story, brick, steel, concrete hospital addns., Sanderson Ave., incl. boiler plant, road, south bldg. nurses home and school, **$280,000**; center unit, kitchen and corridors, **$293,000**; addns. and extens. North Bldg., **$114,000**; laundry, **$28,000**; south wing, garage and passageway, **$90,000.** CD 2/17/44—ENR 3/9/44.

Mass., Somerville — City, J. F. Kennedy, City Hall, plans by W. L. Galvin, 380 Brattle St., Cambridge, 2 story, bsmnt., brick, steel school, Proj. 19-P-83. **$265,000.** Financing not provided. CD 10/23—ENR 11/15.

Mich., Centerline—School Dist. 2, Warren Twp., school addn. **$242,500.**

★**Mich., Detroit**—Michigan Unemployment Corp. Comn., Lansing, 6 story, brick, steel, concrete office, **$2,774,950.**

★**Mich., Detroit**—City, war veterans' memorial hall, incl. meeting rooms, halls and auditorium. **$2,775,000.**

Mich., East Detroit—School Dist. 4, Fractional, Erin and Lake Twps., school, **$285,524.**

★**Mich., Ludington**—School Dist. N. 1, high school. **$639,894.**

★**Minn., Duluth**—Bd. Educ., H. J. Forsberg, clk., defeated **$2,500,000** bonds, remodeling school. CD 3/22.

Minn., Fairmont—Bd. Educ., F. Winzenberg, clk., defeated **$225,000** bonds, 2 story, bsmnt., school. CD 1/25—ENR 2/21.

Minn., Hibbing—City, 2 story, library with auditorium, music room and memorial hall. **$356,400.**

★†**Mich., Iron Mountain** — Veterans Admin., Vermont Ave. between H and I Sts., N.W., Wash. 25, D. C., 250-bed hospital. **$2,555,037.** CD 9/4—ENR 9/6.

Minn., Marshall—Bd. Educ., P. S. Wilson, supt., voted **$450,000** bonds, school, and addns. to existing bldgs. CD 3/14—ENR 4/4

Minn., Minneapolis—State, Bd. Regents University of Minnesota, W. T. Middlebrook, comptroller, Admin. Bldg., Main Campus, Minneapolis, plans by Magney, Tusler & Setter, 202 Foshay Tower, Minneapolis, 3 story, bsmnt., rein.-con. brick, cut stone, etc. heart hospital on main campus. **$350,000.**

Minn., Morris—Stevens Co., E. F. Anderson, aud., 2 story, bsmnt., 142x256 ft., rein.-con., brick hospital. **$300,000.** Magney, Tusler & Setter, 202 Foshay Tower, Minneapolis, consult. engrs.

Miss., Starkville — State College of Mississippi, Starkville, plans by T. Johnston, Starkville, dormitory. **$250,000.**

★**Mo., Carthage** — Carthage School Dist., plans by Neville & Sharp, Midland Bldg., Kansas City, Mo., high school addn. **$679,300.** CD 4/2.

★**Mo., Columbia** — University of Missouri, c/o Bd. Curators, L. Cowan, secy., Jesse Hall, plans by Rathmann, Koelle & Carroll, 316 N. 8 St., St. Louis, Zone 1, brick, concrete, stone dormitory and infirmary unit to provide quarters for 300 men and infirmary with 10 beds, treatment and X-ray rooms, doctors and nurses offices, Proj. 23P244. **$561,200.**

★†**Mo., Kansas City** — Veterans Admin., Verona Ave., between H and I Sts., N.W., Wash. 25, D. C., 250 bed hospital. **$2,418,058.**

Mo., Springfield—City, H. B. Carr, mayor, plans by D. R. Sandford & Sons, Springfield, hospital. **$800,000** bonds voted.

Mo., Springfield—City, H. B. Carr, mayor, City Hall, voted **$350,000** bonds, rein.-con., brick, stone hospital. CD 2/1—ENR 2/7.

★†**Mont., Miles City**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., 100-bed hospital. **$1,050,312.** CD 7/30—ENR 8/2.

Neb., Blair—City, City Hall, plans under way concrete municipal light plant. **$152,000.**

Neb., Fairbury—Bd. Educ., Fairbury, voted **$285,000** bonds, school. CD 3/28.

Neb., Seward—Bd. Educ., Seward, voted **$168,000** bonds, Junior High School. CD 3/28.

Nev., Fallon—Churchill Co. Bd. Educ. plans by Blanchard, Maher & Lockard, 232 W. 1st St., Reno, cement and steel high school addn. **$200,000.** CD 1/4—ENR 3/7.

★**Nev., Las Vegas**—Educational Dist. 12, Las Vegas, plans by C. Beelman & H. Spackler, 1019 Union Bank Bldg., Los Angeles, Calif., high school addns. incl. gymnasium, stadium, etc. **$950,000** and school to replace one in John S. Park School, **$550,000.** Plans bond election for same.

N. J., Bayonne—School Bd., plans under way, school, **$460,000.** Financing provided.

★**N. J., East Orange**—East Orange School Bd., plans under way school. **$695,250.** Financing provided.

N. J., Kearny—School Bd., plans under way, school, **$400,000.** Financing provided.

N. J., Tenafly — City, plans under way, municipal bldg. **$450,000.** Financing provided.

N. J., Vernon—Vernon Twp. Bd. Educ., school. **$164,708.**

N. J., West Orange — School Bd., school **$428,000.** Financing provided.

N. J., Woodridge — Woodridge School Bd., plans under way, school. **$350,000.** Financing provided.

★**N. Y., Astoria**—New York City Housing Auth., 122 E. 42 St., New York, Zone 17, plans by Harrison, Fouilhoux & Abramowitz, 45 Rockefeller Plaza, New York, Zone 20, Astoria Houses, on site bounded by 27 Ave., 8 St., Astoria Blvd., Vernon Blvd., East River and First St. **$7,644,000.** CD 6/15/43—ENR 6/17/43.

N. Y., Brooklyn—Dpt. P. Wks., Municipal Bldg., New York, Zone 7, plans completed by A. G. Morimer, c/o owner, 9 story, nurses home and hospital bldg. at Kings County Hospital, 25 Clarkson Ave. **$280,000.** Financing provided.

N. Y., Cambridge—Town, Central School Comn., Dist. 10, Cambridge, plans by Hampson & Fisher, 30 Backman Ave., Pittsfield, Mass., 2 story, bsmnt., brick, steel school Over **$150,000.** Financing not provided.

★**N. Y., New York**—New York City Housing Auth., 122 E. 42 St., Zone 17, plans by Eggers & Higgins, 542 5 Ave., Zone 19, Alfred E. Smith Houses on site bounded by Madison, Catherine, South, Pearl Sts., Catherine Slip and New Bowery. Proj. NYS-25. **$16,361,000.** CD 6/15/43—ENR 6/17/43.

N. C., Kings Mountain—City, plans by W. W. Hoock, Charlotte, 3 story, bsmnt., brick, stone hospital, **$175,000.** CD 7/16—ENR 7/19.

N. C., La Grange—Bd. Comrs. Lenoir Co., W. L. Measley, chn., R.F.D., LaGrange, school. **$220,000.** E. E. Sams, Kinston, supt. Schools.

N. C., Laurinburg—City, plans by W. W. Hook, Commercial Bank Bldg., Charlotte, 90 bed hospital. **$225,000.** CD 10/25—ENR 11/15.

★**N. C., Lenoir**—Bd. Comrs. Caldwell Co., W. T. Carpenter, chn., Lenoir, voted bonds, constructing, remodeling, enlarging school bldgs. **$1,200,000.** CD 2/28—ENR 3/21.

★**†N. C., Oteen**—Veterans Admin., Vermont Ave. between H and I Sts., N. W., Wash., 25, D. C., new bldgs. **$500,000.**

N. C., Sparta — Allegheny Co. Bd. Educ., Sparta, plans by Lindsey, Madison Dudger Asheville, high school. **$241,000.** CD 4/4.

O., Amherst—Bd. Educ., Exempted Village School, school addns., providing auditorium, cafeteria, shop and music room, **$225,000.**

O., Circleville—Bd. Educ., Circleville, plans by F. F. Glass, 20 S. 3 St., Columbus, industrial arts bldg. at high school, new gymnasium at Circleville High School, school in north sect. full sized athletic stadium and enlarging and imprv. high school auditorium, and all present bldgs. **$387,000** bond election May 7.

O., Elyria—Elyria Memorial Hospital, Elyria, plans by Silsbee & Smith, Turner Block, 50-bed hospital addn. **$400,000.** CD 4/8.

★**O., Lakewood**—City, City Hall, plans by Conrad, Hays, Simpson & Ruth, Hanna Bldg., Cleveland, 2 story, top addn., Lakewood Hospital, Detroit and Belle Aves. **$1,500,000.** CD 11/28—ENR 1/3.

O., New Philadelphia — Tuscarawas County Farm Bureau Co-operative, New Philadelphia, grain elevator and feed warehouse on 5 acre tract, near here.

O., Montpelier—Williams Co. Twp. Dist., J. C. Rundell, member, Bd. Governors, preliminary plans completed by Britsch & Munger, Nicholas Bldg., Toledo, 2 story, bsmnt. hospital. **$280,000** bond election May 7.

O., Sylvania—I. Baumgartner, supt. Schools, Sylvania School Dist., plans by Britsch & Munger, Nicholas Bldg., Toledo, imprv. Burnham High School, and athletic field. **$335,000.** Financing not provided. CD 2/15—ENR 3/14.

★**O., Toledo**—Citizens War Memorial Comn., c/o M. Warner, Toledo, 1, 2 and 3 story World War II memorial bldg. **$1,500,000.** Britsch & Munger, Nicholas Bldg., archts.

★**Okla., Altus**—City, Ethel Williams, clk., voted bonds light plant addn. **$609,000.** J. C. Chisum, Altus, engr. CD 4/4—ENR 8/9.

Okla., Drumwright—S. Whitlock, mayor, electric power plant. **$300,000.** W. R. Holway & Associates, 302 E. 18 St., Tulsa, Zone 5, consult. engrs.

Okla., Guymon—Texas Co., Guymon plans by Noftsger & Lawrence, Oklahoma City, hospital. **$180,000** bond election May 21.

Okla., Seminole—Bd. Educ., City Hall, voted bonds, school. **$250,000.** W. R. Grace, Wewoka, engr.

Okla., Tonkawa—City, City Hall, voted bonds, engine generator unit at light plant. **$106,000.** E. A. Jones, Blackwell, engr. CD 4/4.

Ore., Grants Pass—School Bd., Grants Pass, plans by Freeman & Hayslip, Postal Bldg., Portland, 2 schools and repairing present bldgs. **$300,000.** Bond election Apr. 30.

Ore., Lake Grove—School Bd., Mrs. W. C. Davisson, chn., Lake Grove, plans by R. Sundeleaf, Spalding Bldg., Portland, 1 story, school, Boones Ferry Rd. **$250,000.** Financing not provided.

†Pa., Altoona — Pub. Housing Auth., NHA 270 Bway., New York, 7, N. Y., and Altoona Housing Auth., Altoona, plans completed 150 temporary housing units, transporting and re-erecting barracks from Camp Reynolds. Financing provided.

Pa., Bryn Athyn—Academy of The New Church, c/o Dominique Berninger, archt., 304 York Rd., Jenkintown, preliminary sketches, academy bldg. Over **$150,000.** Financing provided.

†Pa., Harrisburg—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., and Harrisburg Housing Auth., Harrisburg, plans completed 150 temporary housing units, transporting and re-erecting barracks from Camp Reynolds. Financing provided.

Pa., New Castle—City, City Hall, plans by The Thayer Co., 408 Greer Bldg., and W. G. Eckles Co., 719 Lawrence Savings & Trust Bldg., 3 story, bsmnt., brick, steel city hall. **$250,000.** CD 1/4—ENR 3/7.

Pa., Norbeth—Harold D. Speakman American Legion Post Bldg., John H. Jeffries, Jr., chn., Arlington Rd., Penn Valley, clubhouse. **$150,000.** Financing provided.

Pa., Phila. — City Dpt. P. Safety, City Hall, plans by Office of Paul P. Cret, 1518 Walnut St., fire house, Rhawn St. and Verre Rd., S. F.-1, **$160,000**; fire station, Stenton Ave. and Mechanic St., S. F.-2, **$160,000**; fire station, Broad St. and Oregon Ave., S. F.-3, **$150,000.** Financing provided. J. Roletter, city archt. CD 11/24/44, 2/19/46—ENR 12/14/44, 3/14/46.

★**Pa., Phila.**—City, Dpt. P. Safety, City Hall, plans by Office of Paul P. Cret, 1518 Walnut St., police stations, S.P.-1, **$800,000**; SP-4, **$800,000**; SP-12, **$800,000**; SP-16, **$800,000**; SP-19, **$800,000**; SP-21, **$800,000**; SP-24, **$800,000**; SP-26, **$800,000**; SP-35, **$800,000**; SP-37, **$800,000**; SP-41, **$800,000**; police garage, SP-2, **$227,875**; new station house, 13th Police Dist., SP-20, **$273,165**; 25th Police Dist., SP-25, **$307,165.** Financing not provided. J. Roletter, city archt. CD 11/24/44—ENR 12/14/44.

Pa., Phila.—City, Dpt. P. Safety, City Hall, plans by Office of Paul P. Cret, 1518 Walnut St., station house 10 and Thompson Sts., SP-15. **$305,165.** Financing not provided. J. Roletter, city archt. CD 2/19—ENR 3/14.

Pa., Phila.—City, Dpt. P. Safety, City Hall, plans by office of Paul P. Cret, 1518 Walnut St., shop bldg., for Bureau of Fire, S.F.-4, **$251,764**; shop for Bureau of Traffic Engrg., S.T.-3, **$216,500.** Financing not provided. R. Roletter, city archt.

★**Pa., Phila.**—City Dpt. P. Welfare, City Hall Annex, plans by Office of Paul P. Cret, 1518 Walnut St., repairs, maintenance to other bldgs., and grounds, House of Correction, We C-3-12, 15-19, 22, 26-31, **$741,598**; wing Women's Penal Bldg., WeC-13, **$442,680**; addns., imprv. Men's Penal Bldg., at House of Correction, WeC-14, **$150,000**; House of Correction laundry bldg., We-C-20, **$54,590**; industrial shop bldg. at House of Correction. We-C-21, 2, **$101,065.** Financing not provided. J. Roletter, city archt.

Pa., Phila.—City Electrical Bureau, City Hall, plans by office of Paul P. Cret, 1518 Walnut St. Bldg., housing municipal fire alarm sys., SE-1. Over **$250,000.** Financing not provided. J. Roletter, city archt. CD 11/24/44—ENR 12/14/44.

★**Pa., Phila.**—City Electrical Bureau, City Hall, plans by Office of Paul P. Cret, 1518 Walnut St., city hall addns., imprvs. S. E. 2, **$600,000**; city hall annex addns., imprvs. S. E. 4, **$330,000.** Financing not provided. J. Roletter, City Hall, city archt. CD 11/24/44—ENR 12/14/44.

★**Pa., Phila.**—Free Library of Phila., Logan Square, plans by Office of Paul P. Cret, 1518 Walnut St., Lawndale Branch Library, FL-5; Awbury Branch Library, FL-4, Erlen Branch Library, FL-2; Rhawnhurst Branch Library FL-3; Mayfair Branch Library, FL-1, each **$150,000**; main library addn., FL-6, **$2,690,500.** Financing not provided. J. Roletter, city archt. CD 11/24/44—ENR 12/14/44.

★**Pa., Phila.**—Phila. Commercial Museum, 34 and Spruce Sts., plans by Office of Paul P. Cret, 1518 Walnut St., repairing commercial museum, Mc 1-3, **$150,000**; addns. to north and central bldgs., Mc-7, **$150,000**; reconstructing exhibition Hall, Mc-4, **$2,255,833**; repair Convention Hall, Mc 5-8-9, **$250,000.** Financing not provided. J. Roletter, city archt.

★**Pa., Phila.**—Phila. Commercial Museum, 34 and Spruce Sts., plans by Office of Paul P. Cret, 1518 Walnut St., addns., alterations at Moyamensing Prison, PI-24, 26, 27, **$155,000**; repair, and renew lighting and water lines Pi-16, **$40,000**; Pi-23, **$40,000**, both at Moyamensing Prison. Financing not provided. Morris Knowles, Inc, Park Bldg., Pittsburgh, consult. engrs. E. Taylor, Water Bureau Chief. CD 12/1/44—ENR 12/14/44.

★**Pa., Phila.**—Phila. County Bd. Prison Inspectors, City Hall, plans by Office of Paul P. Cret, 1518 Walnut St., new bldg. and addns., PI-1, **$550,000**; Pi-11, **$550,000**; Pi-9, **$550,000**; surveys repair and renew water lines, Pi-2, **$25,000**; Pi-8, **$28,000**; Pi-10, **$28,000**; Pi-12, **$25,000**, at Holmesburg Prison. Financing not provided. Morris Knowles, Inc., Park Bldg., Pittsburgh, consult engr. E. Taylor, Water Bureau Chief.

†Pa., Phila.—Pub. Housing Auth., NHA, and Phila. Housing Auth., 21 St. and Winter Sts., plans by Wigham & Tilden, 1601 Chestnut St., transportation and re-erection 700 temporary demountable housing units from various locations.

Pa., Warren—Bd. Educ., High School Bldg., plans by Lawrie & Green, 321 N. Front St., Harrisburg, 2 story, part bsmnt., brick on hollow tile, school, incl. small gymnasium **$275,000.** CD 3/29—ENR 4/18.

★**†Pa., Wilkes-Barre**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., 475-bed hospital. **$3,703,063.** CD 9/28—ENR 10/11.

S. C. Marion—City, plans by Lafaye, Lafaye & Fair, 1226 Sumter St., Columbia, 50 bed, 1 story hospital. **$300,578.**

S. C., Rock Hill—York County Hospital Authority, Rock Hill, plans by W. W. Hook, Commercial Bank Bldg., Charlotte, N. C., 1-4 story, masonry hospital addn. and 1-2 story, masonry hospital, addns., 1 story boiler house and laundry. **$341,500.**

★**Tenn., Knoxville**—University of Tennessee, Knoxville, plans by Barber & McMurry, 517½ W. Church Ave., concrete, masonry dormitory, approx. **$941,700.** CD 8/20/43—ENR 8/26/43.

★**Tenn., Memphis**—City, City Hall, 3 story, underground parking garage, accommodating 3,000 cars. **$1,000,000.**

Tenn., Nashville—City, T. L. Cummins, mayor, City Hall, plans by Hart & McBryden, 3rd National Bank Bldg., concrete, steel school. **$150,000.**

Tenn., Nashville—State, c/o Robert H. Oakley, purch. agt., Nashville, TB hospital at State Penitentiary. **$150,000.** Hart Freeland & Roberts, 3rd National Bank Bldg., archts. CD 1/10—ENR 1/27.

Tex., Agua Dulce—Agua Dulce Ind. School Dist., Agua Dulce, plans by Hamon & Co., 715 S. Tancahua St., school bldg. unit, **$175,000** bonds voted. CD 4/1—ENR 4/18.

Tex., Alice—Alice Independent School Dist., J. W. Roach, supt., Alice, constructing School 1, **$150,000**; School 2, **$150,000.** Financing provided.

★**Tex., Amarillo**—City, fire station units; community center; coliseum. Each over **$150,000.** Financing not provided.

★**†Tex., Big Spring**—Veterans Admin., Vermont Ave. between H and I Sts. N.W., Wash. 25, D. C., 250-bed hospital. **$2,570,753.** CD 7/13—ENR 7/19.

Tex., Kermit—Winkler Co., c/o E. E. Lam, chn. Bldg. Comn., Kermit, plans by W. C. Hedrick, 1st National Bank Bldg., Fort Worth, hospital bldg. **$375,000.** Financing provided CD 3/29—ENR 4/18.

COMMERCIAL BUILDINGS

PROPOSED WORK

Ala., Cullman—St. Bernard College, Cullman, plans by E. J. Schulte, 920 E. McMillan Ave., Cincinnati, O., administration, residence hall, classrooms, lecture hall, game rooms, etc. **$200,000.**

★**Calif., Los Angeles**—Hotel Statler Co., Pennsylvania Hotel, 7 Ave. and 33 St., New York, N. Y., plans by Holabird & Root, 333 N. Michigan Ave., Chicago, Ill., c/o J. W. Root, Town House, Los Angeles, 13 story, 1,400 room, rein.-con. hotel, Figueroa St. between 7 St. and Wilshire Ave. **$14,000,000.** CD 3/13—ENR 3/28.

★**Calif., Malibu**—Malibu Quarterdeck Imprvt. Co., c/o E. D. Turner, Beverly-Wilshire Hotel, Beverly Hills, 2 story, 40x285 ft. club house, five 1 story wings, 2 story boat garage, swimming pool, Yacht Harbor, Malibu Creek inlet. Over **$500,000.**

Calif., Modesto—Cooper's Dpt. Store, T. H. Cooper, mgr., Brix Bldg., Fresno, 2 story, bsmnt. department store. **$300,000.**

Calif., San Francisco — Fairmont Hotel, California and Mason Sts., plans by Hertzka & Knowles, 85 Post St., hotel alterations, addns. **$250,000.** CD 3/5—ENR 3/14.

Calif., San Jose—Rucker Realty Co., 24 N. 1 St., 55 homes, Saratoga-Los Gatos Hy. **$250,000.**

Fla., Orlando—Kenneth Miller, Orlando, preparing plans, 50 brick houses, **$250,000.**

★**Fla., St., Augustine**—Southern Bell Telephone Co., c/o T. W. Fleming, telephone exchange bldg. **$500,000.** Financing provided.

Fla., Winter Park—Winter Park Real Estate Bd., c/o R. Greene, pres., 50 small houses, **$250,000.**

★**Ill., Chicago**—Hazann Corp., c/o Leichenko & Esser, archts., 225 N. Michigan Ave., 5 story, brick, stone, rein.-con. store and office **$850,000.**

Ill., Chicago—Illinois Masonic Hospital, 834 Wellington St., plans nearing completion by Schmidt, Garden & Erickson, 104 S. Michigan Ave., 5 story, brick, concrete, stone, steel wing hospital addn. **$350,000.**

★**Ill., Quincy**—Illinois Bell Telephone Co., 212 W. Washington St., Chicago, plans by Holabird & Root, 333 N. Michigan Ave., Chicago, 2 story, 150 x 150 ft., brick, steel concrete dial telephone bldg. **$1,500,000.**

★**Md., Baltimore**—Hutzler Bros., 212 N. Howard St., sketches by J. R. Edmunds, Jr., 409 Calvart Bldg., raising 5 and 6 story bldgs to 10 story, department store addns **$2,000,000.**

★**Mass., Lynn**—Union Hospital, 25 Linwood Rd., plans by Curtin & Riley, 45 Newbury St., Boston, brick, steel, concrete hospital. Linwood Rd. **$550,000.** Financing provided.

Mass., Suffield—Suffield Academy, C. Hahn, headmaster, brick, steel school, incl. physical education unit, auditorium, heating plant. **$225,000.** Financing not provided.

Miss., Prentiss — Northeast Mississippi Junior College, c/o pres., Prentiss, imprv. college. **$300,000.**

N. J., Cape May Court House—The Burdette Tomlin Memorial Foundation B. J. Smith, pres., Cape May Court House, plans by R. R. Chatfield, 324 W. Chelten Ave., Phila., Pa., memorial hospital and nurses home. Over **$205,000.** Financing not provided.

N. Y., Bayside—Affiliated Enterprises, c/o S. Paul, 163-18 Jamaica Ave., Jamaica, plans completed twenty-five 1 and 2 family dwellings, 222 St., 73 and 59 Aves. **$224,000.** Financing provided.

N. Y., Bayside—Empire Associates, c/o J. Unger, archt., 138-22 78 Ave., Flushing, plans completed twenty-four 1 family homes, 46 Ave., E. Bell Blvd. and W. 215 St. **$220,000.** Financing provided.

N. Y., Brooklyn—Hyman Goldberg, c/o J. Fishkind, archt., 1859 E. 31 St., Zone 10, plans completed seventeen 2-family dwellings, 1470-76 E. 32 St., and 3102-3132 Kings Highway. **$205,000.** Financing provided.

COMMERCIAL BUILDINGS, (Proposed Work, Con't.)

★ **N. Y., Eastchester**—Bel Air Gardens Corp., c/o F. Saviano, 53 Columbus Ave., Tuckahoe, garden type apartment, White Plains Post Rd. opposite Lincoln Ave. **$500,000.**

N. Y., Flushing—Bennett Harmon, c/o S. Paul, archt., 163-18 Jamaica Ave., Jamaica, fifteen 2 family dwellings, 67 Ave. and 173 and 174 Sts. **$205,000.** Financing provided.

N. Y., Flushing—Northcrest Gardens Corp., c/o M. Weston, archt., 44 Court St., Brooklyn, Zone 2, plans completed thirty-five 1 family homes, 77 Rd. and 150 St. **$227,500.** Financing provided.

N. Y., Flushing—E. St. John Mann, c/o A. W. Lewis, archt., plans completed 1 story theatre and store, 160 St. near Union Turnpike. **$205,000.** Financing provided.

N. Y., Flushing—Speed Builders, Inc., c/o H. I. Feldman, 415 Lexington Ave., New York, Zone 17, plans completed, 36 one-family homes, Reeves Ave., 149 and 150 Sts. **$259,000.** Financing provided.

★ **N. Y., Forest Hills**—Dillerwood Realty Corp., c/o I. L. Crausman, 332 E. 149 St., New York, Zone 51, 6 story, 119 family apartment, 99 St. between 65 Ave. and 65 Rd. **$900,000.** Financing provided.

★ **N. Y., Greenburgh**—Ruthmar Holding Corp., c/o H. R. Wilson, 60 E. 42 St., New York, Zone 17, 71 one family dwellings, Bronx River Parkway, Broad St., Ethelton Rd. **$1,300,000.**

N. Y., Jackson Heights—Apartment Bldg. Corp., M. Kaufman, pres., c/o Queensboro Corp., 81-20 37 Ave., garden apartment house, 79 St. Over **$250,000.**

N. Y., Jackson Heights—Edmur Constr. Corp., c/o O. I. Silverstone, 153 Pierrepont St., Brooklyn, plans completed Zone 2, twenty-eight 1 family dwellings, 30 Ave., 87 and 88 Sts. **$448,000.** Financing provided.

N. Y., Little Neck—Lake Success Hills, c/o A. E. Allen, archt., 90-34 161 St., Jamaica, plans completed twenty-two 2 family dwellings, Horace Harding Blvd. and Hewlett Ave. **$220,000.** Financing provided.

★ **N. Y., New York**—J. Freidus, 45 Crosby St., Zone 12, plans by M. Wechsler, 17 E. 42 St., Zone 17, 500 family housing, incl. three ten story apartments and two 6 story apartments, on 18½ acre site, Henry Hudson Parkway in Riverdale. **$4,000,000.**

★ **N. Y., New York**—Harlem Syndicate, Inc., E. Ornstein pres., 1543 3 Ave., plans by J. Lewis, 15 W. 44 St., Zone 18, 20 story hotel, 921 Eighth Ave. and 304 W. 55 St. Over **$1,000,000.**

★ **N. Y., New York**—Manhattan Air Terminals, Inc., H. Hill, pres., 100 E. 42 St., Zone 17, plans by J. B. Peterkin, 36 W. 34 St., airlines terminal on block west of First Ave. between 37 and 38 Sts. **$5,000,000.**

★ **N. Y., New York**—S. Rudin, 36 W. 44 St., Zone 18, plans by Emery Roth & Sons, 18 E. 48 St., Zone 17, 14 story apartment Lexington Ave. and 55 St. **$3,500,000.**

★ **N. Y., New York**—Syndicate, c/o J. Levy, 3402 Queens Blvd., Long Island City, 25 story office bldg., on plot 316 ft. on Bway., 296 ft. on Central Park West, 195 ft. on 61 St., and 37 ft. on Columbus Circle. Over **$2,000,000.**

N. Y., Queens Village—Devonshire Village, Inc., c/o S. Paul, archt., 163-18 Jamaica Ave., Jamaica, plans completed, forty-nine 1 family dwellings, Castlewood St., 76 and 77 Aves., 266 and 265 Sts. **$367,500.** Financing provided.

N. Y., Rego Park—D. Tyman, c/o A. Cassens, archt., 92-32 Union Hall St., Jamaica, plans completed eighteen 2 family dwellings, Woodhaven Blvd., 62 Ave. and 62 Rd. **$270,000.** Financing provided.

★ **N. Y., Rockville Center**—Syndicate, c/o S. Pearce, 70 Pine St., New York, eighty-five 1 family homes on 17 acre tract in Lakeview, near here. Over **$500,000.**

★ **N. Y., Westbury**—Loshen Bros., Inc., 164-09 89 Ave., Jamaica, 200 dwellings on 60 acre site exten. from Jericho Turnpike to Northern State Parkway near Glen Cove Rd. **$3,000,000.**

O., Cleveland—Ohio Bell Telephone Co., 750 Huron Rd., plans 80% completed third floor addn. to telephone bldg., 5400 Prospect Ave. **$236,000.** Geo. S. Rider Co., Terminal Tower, engrs.

O., East Cleveland—Windermere Methodist Church, Rev. M. Wayne McQueen, pastor, Euclid Ave. at Holyoke, plans by Maier & Walsh & Dickerson, E. 9 and Prospect Sts., Cleveland, church. **$225,000.**

★ **O., Lorain**—St. Josephs Hospital, Sister Mary Adelaide, hospital supt., Lorain, 100-bed hospital addn. **$700,000.**

Pa., Lancaster—Grand Theatre Corp., Lancaster, rebuilding fire-damaged theatre and stores. Over **$205,000.**

Pa., Lewistown—Wm. G. Humphries, c/o Lowrie & Green, archts., 321 N. Front St., Harrisburg, theatre and stores development. Over **$205,000.** Financing provided.

Pa., Phila.—Climax Dental Supply Co., Inc., 16 and Walnut Sts., plans by M. A. Bernhardt, 214 S. Broad St., office bldg. and store. Over **$205,000.** Financing provided.

Pa., Phila.—M. K. Fisher, c/o L. Friedman, Lewis Tower Bldg., commercial bldg. Over **$205,000.** Financing provided.

Pa., Phila.—Gloria Dei Church, Swanson and Christian Sts., church alterations, addns. **$350,000.**

Pa., Phila.—Owner, c/o Roth & Fleisher, archts., 1420 Walnut St., theatre and stores development. Over **$205,000.** Financing provided.

★ **Pa., Pittsburgh**—W. T. Grant Co., 1441 Bway, New York, N. Y., store, Smithfield and Olive Sts. **$500,000.**

★ **Pa., Pittsburgh**—Pennsylvania College for Women, P. R. Anderson, pres., Woodland Rd., chapel and administration bldg., **$600,000**; dining hall and alumnae offices, **$250,000.** Financing provided.

★ **Pa., Pittsburgh**—St. Mary's Roman Catholic Church, Pressley St., plans by F. A. Berner, 331- 4 Ave., 2 story, 150x150 ft., brick, stone, steel parochial school. **$600,000.**

★ **Pa., Swarthmore**—Swarthmore College, Swarthmore, plans by S. E. Martin, 117 S. 17 St., Phila., science bldg., **$350,000;** women's gymnasium, **$210,000.** Financing provided. CD 12/20—ENR 1/3.

Pa., Swarthmore — Swarthmore College, Swarthmore, plans by S. E. Martin, 117 S. 17 St., Phila., library. **$400,000.** Financing provided. CD 12/20—ENR 1/10.

★ **Pa., Wayne** — Mid-Atlantic Properties, Inc., c/o Albert M. Greenfield & Co., Bankers Security Bldg., Phila., preliminary plans business development. **$1,000,000.** Financing provided.

Tenn., Maryville—Local 309, United Steel Works, Maryville, 3 story office and recreation bldg. **$200,000.**

Tex., Abilene—O. D. Dillingham, Abilene, 8 story, bsmnt., steel, rein-con. office. **$300,000.** Financing provided.

Tex., Denison—First Baptist Church Congregation, Denison, plans by Easterwood & Easterwood, Bewley Bldg., Fort Worth, brick, concrete, gothic type, etc. church. **$210,000.** Financing provided. CD 10/5/44—ENR 10/19/44.

Tex., Huntsville—Sam Houston Teachers College, Huntsville, converting 800 acre Army Training Camp into apartments and dwellings for student housing. **$350,000.** Financing not provided.

Tex., San Antonio—Fair Lumber Co., 170 Conrad St., 40 residences. **$225,000.** Financing provided.

★ **Tex., Wichita Falls** — Wichita General Hospital, Wichita Falls, plans by R. C. Arnhold & J. G. Dix, 200-bed hospital addn. to be called Wichita Memorial Hospital. **$2,000,000.** Financing not provided. CD 4/2—ENR 4/18.

Wash., Wenatchee — Deaconess Hospital, Wenatchee, plans by G. W. Stoddard, Orpheum Bldg., Seattle, Zone 1, hospital addn. **$250,000.** CD 6/13/45—ENR 6/28/45.

Wis., Racine — Young Women's Christian Assn., 312 7 St., plans by Fitzhugh Scott, 724 E. Mason St., Milwaukee, 3 story Y.W.C.A. Bldg. **$350,000** or more. Land rights not cleared, financing not provided.

B. C., Victoria—Housing Enterprises, Ltd., 395 W. Fleet St., Toronto, Ont., 90 dwellings, Alder and Finlayson Sts. **$450,000.**

Ont., Hamilton—American Can Co., Ltd., Medical Arts Bldg., 4 story, bldg. for company's quarters. **$265,000.**

Ont., Port Elgin—Royal Princess Lodge, Inc., Port Elgin, 130 room hotel addn. **$250,000.**

Ont., Windsor—Elmwood Hotel, Ltd., B. H. Yuffy, secy., Windsor, imprvs., landscaping hotel grounds. **$220,000.**

Que., Montreal—L'Hospital Generale du Nord, c/o P. Poirier, notary public, 14 St. James St., hospital. Over **$300,000.**

Que., Sherbrooke—Parish of St. Jean de Breheuf, Rev. G. Leteadre, church, Montreal Rd., corner Chemin Therrieu. **$250,000.**

INDUSTRIAL BUILDINGS

PROPOSED WORK

Calif., Elk Grove—WINERY—Gibson Wine Co., end of Kent St., 4 winery bldgs. **$266,000.**

Calif., Fresno—PLANT—Swift & Co., Union Stock Yards, Chicago, Ill., poultry dressing plant. **$127,362.**

Calif., Oakland—LUMBER MILL—Interbay Lumber Co., 1001-16 Ave., lumber mill and yard. **$250,000.**

Calif., Redwood City—INDUSTRIAL—Basalt Rock Co., Inc., 8 and River Sts., Napa, industrial bldg. **$175,000.**

★ **Calif., Redwood City** — PLANT — Plant Rubber & Asbestos Works, 537 Brannan St., San Francisco, lumber and corrugated sheets plant. **$972,000,** incl. equip. L. S. Rosener, 233 Sansome St., San Francisco, consult. engr.

Calif., Sacramento — PLANT — Pacific Can Co., 290 Division St., San Francisco, mfg. plant. **$100,000.**

★ **Conn., Hartford**—FACTORY—Jacobs Mfg. Co., 2074 Park St, brick steel factory addn., Elmwood Sect. **$600,000.** Financing provided. Albert Kahn Associated Architects & Engineers, Inc., 345 New Center Bldg., Detroit, Mich., consult. engr. CD 5/24—ENR 5/30.

Fla., Miami — WAREHOUSE — Food Fair Stores, Inc., 2223 E. Allegheny Ave., Phila., Pa., warehouse. Over **$150,000.** Financing provided.

Idaho. Caldwell—PLANT—F. L. Garrett, Wilder, quick freeze packing and canning plant. **$100,000.**

★ **Ill., Chicago**—WAREHOUSE—Grocerland Co-Operative, G. Kokales, genl. mgr., 1852 Water St., 1 story, brick, concrete, steel warehouse. **$600,000.**

Ind., Flora — FACTORY — Rider-Furniture Co., V. D. Rider, pres., Deer Creek, 1 story, 50x500 ft. and 133x144 ft., concrete blocks, structural steel furniture factory. **$100,000.**

Ind., Muncie—FACTORY—Warner-Gear Co., B. Barr, in charge of construction, E. Seymour St., plans under way 1 story, brick, rein.-con., structural steel factory addn. **$350,000.** CD 2/13—ENR 2/28.

★ **Kan., Wichita**—PLANT—Stanolind Oil & Gas Co., Stanolind Bldg., Tulsa, Okla., commercial synthol plant 100,000,000 cu. ft. daily capacity. **$15,000,000.** Financing provided.

Md., Baltimore—PLANT—Crown Cork Seal Co., Eastern Ave. and Krisson St., plans completed by L. R. White, Jr., 10 W Chase St., 1 story addn., 70x125 ft., structural steel, rein.-con. plant addn. **$80,000.**

Minn., South St. Paul—PLANT—Armour & Co., South St. Paul, food processing bldg. at plant **$280,000.**

★ **Mo., St. Louis**—FACTORY, etc.—Schlueter Mfg. Co., 4616 North Broadway, Zone 7, 1 story, brick, rein.-con. steel factory and office, on 20 acre tract, Grand Blvd., Blow St., and Robert Ave. **$800,000.**

N. J., Passaic—NEWSPAPER PLANT, etc.—Passaic Daily News, Inc., 140 Prospect St., plans under way newspaper plant and F. M. radio station and executive offices, Main and Highland Aves. **$250,000.**

N. Y., Brooklyn—WAREHOUSE—K. Holding Corp., c/o L. F. Boulware, archt., 654 Madison Ave., New York, Zone 21, plans completed 1 story warehouse, Columbia and Kane Sts. **$250,000.** Financing provided.

N. Y., Long Island City—PLANT—Germal Realty Corp., c/o J. J. Gloster, archt., 1472 Bway., New York, Zone 18, plans completed 1½ story bottling plant, Vernon Blvd., near 35 Ave. **$150,000.** Financing provided.

★ **O., Hamilton**—PLANT, COKE OVENS—American Rolling Mill Co., Middletown, 25 coke ovens at plant. **$1,275,000.**

★ **O., Mingo Junction**—PLANT—Wheeling Steel Corp., Wheeling Steel Corp. Bldg., Wheeling, W. Va., plant expan. and modernization. **$5,000,000** or more.

★ **Pa., Kimberton (Valley Forge P.O.)**—PLANT—Ciba Chemical Laboratories, Inc., Morris Ave., Summit, N. J., plant. **$1,000,000.** Financing provided.

★ **Pa., Norristown**—PLANT—CIBA Chemical Laboratories, Inc., 627 Greenwich St., New York, 14, N. Y., chemical plant on 147 acre site near Valley Forge, **$1,000,000.**

★ **Tex., Dallas**—POWER TRANSFORMER STATION—Dallas Power & Light Co., Dallas Power & Light Bldg., plans under way constr. of a power transformer station near Bachman Lake. **$588,700.** Financing provided.

Tex., Hereford — PLANT — Deaf Smith County Food Products Co., Hereford, canning and food processing plants. **$250,000.** Financing provided.

Tex., Hereford — GRAIN ELEVATORS — Fraser Milling Co., Hereford, reconstructing 2 grain elevators. **$150,000.** Financing provided.

★ **Tex., Waco**—POWER PLANT, etc.—Brazos River Transmission Electric Co-operative plans under way two 10,000 kw. electric generating power plant units, each **$2,171,000;** imprv. 28 mi. rural electric power transmission lines, **$48,000;** constructing 687 mi. rural electric power transmission lines, **$810,000.** Financing provided.

★ **N.W.T., Fort McMurray**—PLANT—Abasand Co., Ltd., Fort McMurray, experimental plant for extracting oil from fields of tar sands. **$1,000,000.**

★ **Alaska** — WAREHOUSE, PIER, etc. — Union Oil Co., 2901 Western Ave., Seattle, Wash., 60x120 ft. frame warehouse, pier for tankers, 2 story residence, pipelines at Whittier; warehouses, storage tanks, car and truck loading platforms, office space at Anchorage and Fairbanks. **$1,000,000.**

★ **B. C., Kimberley**—PLANT—Con Mining & Smelting Co., Ltd., 215 W. St. James St., Montreal, Que., concentrator plant at Sullivan Mines, 4 mi. haulageway from mine to concentrator, 2 mi. rock tunnel, underground crushing plant. **$3,000,000.**

★ **Ont., Terrace**—MILL—Long Lac Pulp and Paper Co., Ltd., 263 Adelaide St. W., Toronto, mill and townsite. Over **$1,000,000.**

★ **Que., Montreal**—PLANT—Dominion Oilcloth & Linoleum Co., Ltd., 2200 St. Catherine St. E., steel, brick, concrete plant, mfg. calendered linoleums. **$750,000.**

Proposal Advertisements see pp. 29 to 31

Bids: July 19 (132)

CITY OF ROME, NEW YORK

Incinerator Plant and Sewage Treatment Plant Additions

Sealed proposals will be received by the Clerk of the Board of Estimate and Contract of the City of Rome, New York, at the Office of the City Clerk, City Hall, until 3:30 P.M. E. D. T., July 19, 1946, for constructing an Incinerator Plant for garbage and rubbish, complete with all accessories and access roadway; and Sewage Treatment Plant Additions complete with all accessories.

The bids will be publicly opened and read aloud at a meeting of the Board of Estimate and Contract to be held in the Office of the Mayor at 4:00 P.M. E. D. T., July 19, 1946.

All proposals to be considered must be accompanied by a certified check of the bidder in the amount of five (5) per centum of the bid. The said check is to be made payable to John W. Hughes, City Treasurer.

The bidder may submit separate proposals for either the construction of the Incinerator or the Sewage Treatment Plant additions, or he may submit a combined proposal for constructing both. Separate proposal forms are required for single and combined bids.

The Board of Estimate and Contract will award the contract to the bidder or bidders whose bids are in the best interest of the City of Rome. The City of Rome reserves the right to waive any informalities in, or to reject any or all bids.

The successful bidder will be required to furnish a performance bond in an amount not less than 100 per cent of the bid.

Plans, specifications, form of proposal, bond and contract for either project may be obtained at the Office of the City Engineer, Rome, New York or at the office of Malcolm Pirnie Engineers, 25 West 43rd Street, New York 18, New York, on deposit of Twenty-Five Dollars ($25.00). If plans for both projects are obtained, a deposit of Thirty-Five Dollars ($35.00) will be required. If a bid is submitted, the deposit will be refunded upon return of the plans and specifications. In case a bid is not submitted, Fifteen Dollars ($15.00) of the deposit in the case of a single set of plans, and Twenty-Five Dollars ($25.00) in the case of both sets of plans, will be refunded upon the return of the plans and specifications in good condition within two weeks after date of receiving proposals.

Joseph E. Lolo
Clerk of Board of Estimate and
Contract of the City of Rome, N. Y.
Dated: Rome, N. Y., June 24, 1946.

Bids: July 9 (130)

Construction Work

BOARD OF PUBLIC WORKS

GENEVA, N. Y.

Sealed proposals will be received by the Board of Public Works at its office in the City Hall until 10:00 A.M. Eastern Daylight Saving Time on Tuesday, July 9, 1946 and then at said Board's office publicly opened and read aloud for the reconstruction of two (2) concrete bridges and repair and resurfacing the following streets:

North Exchange Street from City Line to North Street. Exchange Street from North to Lake Street. Lake Street and Lake Road from Exchange to Pre-Emption Road. BPW estimate $55,551.35. Deposit required $2800.00.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the City Superintendent in Geneva. Plans will be furnished upon payment of $5.00, by cash or check, payable to Walter Foreman, City Treasurer. No refund will be ade for plans, specifications or proposal forms.

Special attention of bidders is called to General Information for bidders in the proposal, specifications and contract agreement. Proposal must be submitted in sealed envelope plainly endorsed on the outside of the envelope.

Each proposal must be accompanied by cash, draft, or certified check, payable to City Treasurer of Geneva, for the sum as specified in the advertisement for proposals and the proposal itself. The retention and disposal of such cash, draft or check by the City shall conform to regulations as set up in Information For Bidders.

Local prevailing Wage Rate per hour for above work must be paid.

The right is reserved to reject any or all bids.

HARRY M. BOLTON
SUPERINTENDENT

Bids: July 16 (136)

Electric Motors, Etc.

CONTRACT 362

SEALED BIDS will be received by the Board of Water Supply, at its offices, thirteenth floor, 120 Wall Street, New York City, until 10:00 A. M., Eastern Standard Time, on Tuesday, July 16, 1946, for Contract 362, for furnishing, testing and delivering two electric motors for operation of 60-inch by 54-inch gate valves, ten electric motors for operation of 48-inch gate valves and electrical control equipment for the West Branch effluent chamber of the Delaware aqueduct, all as set forth in the specifications.

No bid will be received and deposited unless accompanied by a certified check upon a National or State bank, drawn and made payable to the order of the Comptroller of the City of New York, in the amount of one thousand dollars ($1,000.00), for the proper execution of the contract.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, requirements as to surety, etc., can be obtained at the office of the Secretary at the above address, upon application in person or by mail, by depositing the sum of five dollars ($5.00) in cash or its equivalent for each pamphlet. Within 30 days following the award of contract or rejection of bids, the full amount of such deposit will be refunded for each pamphlet submitted as a bid and a refund of four dollars ($4.00) will be made for each other pamphlet returned in acceptable condition. Arrangements will be made whereby prospective bidders desiring blueprints of the contract drawings for their own use may secure same, the cost thereof to be paid by them. For further particulars, apply at the office of the Chief Engineer at the above address.

IRVING A. HUIE, President; HENRY HESTERBERG, RUFUS E. McGAHEN, Commissioners, Board of Water Supply; RICHARD H. BURKE, Secretary.

Bids: July 16 (135)

Construction of Wall

NEVERSINK DAM

CONTRACT 384

SEALED BIDS will be received by the Board of Water Supply, at its offices, thirteenth floor, 120 Wall Street, New York City, until 10:00 A. M., Eastern Standard Time, on Tuesday, July 16, 1946, for Contract 384, for the excavation of the cut-off trench and the construction of the cut-off wall for the Neversink dam, the grouting of the ledge rock underlying the cut-off wall and the construction of embankments to the extent required for the disposal of excavated materials, all as set forth in the specifications. The Neversink dam is located on the Neversink river about one-half mile downstream from the Village of Neversink, in the Town of Neversink, Sullivan County, New York.

The cut-off wall will be approximately 2,500 feet in length and will extend from elevations somewhat above the original surface of the ground to sound ledge rock. The greatest depth to rock from the original surface is about 150 feet and the deeper portions of the cut-off wall will be constructed by sinking a series of reinforced concrete caissons from the bottom of an open cut trench to ledge rock and sealing them to the rock and to each other. The remainder of the cut-off wall will be constructed in open cut.

No bid will be received and deposited unless accompanied by a certified check upon a National or State bank, drawn and made payable to the order of the Comptroller of The City of New York, in the amount of one hundred and fifty thousand dollars ($150,000.00), for the proper execution of the contract.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, requirements as to surety, etc., can be obtained at the office of the Secretary at the above address, upon application in person or by mail, by depositing the sum of five dollars ($5.00) in cash or its equivalent for each pamphlet. Within 30 days following the award of contract or rejection of bids, the full amount of such deposit will be refunded for each pamphlet submitted as a bid and a refund of four dollars ($4.00) will be made for each other pamphlet returned in acceptable condition. Arrangements will be made whereby prospective bidders desiring blueprints of the contract drawings for their own use may secure same, the cost thereof to be paid by them. For further particulars, apply at the office of the Chief Engineer at the above address.

IRVING V. A. HUIE, President; HENRY HESTERBERG, RUFUS E. McGAHEN, Commissioners, Board of Water Supply; RICHARD H. BURKE, Secretary.

Bids: July 22 (143)

Highway Lighting

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ORNAMENTAL HIGHWAY LIGHTING—
ROUTE 25

Construction of Highway Lighting System, Route 25, Sections 32A and 16C, Port Street, Newark, to North Avenue, Elizabeth, in the Counties of Essex and Union. The work consists of furnishing and installing an ornamental highway lighting system composed of eleven (11) series circuits employing trench-lay cable. The principal items of construction are:
Estimated:

365—Ornamental Standards
100,000 feet—Trench-lay Cable
36,000 feet—Pole and Bracket Cable
486—Luminaires
371—"IL" Transformers

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Monday, July 22, 1946, at ten A. M. Eastern Standard Time, (eleven o'clock, DAYLIGHT SAVING TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

OFFICIAL PROPOSALS

(Continued from page 29)

OFFICIAL PROPOSALS

Bids: July 10 (142)

Construction & Reconstruction Highway Projects

STATE DEPARTMENT
OF PUBLIC WORKS
BUREAU OF CONTRACTS & ACCOUNTS
ALBANY, N. Y.

Sealed proposals will be received by Henry A. Cohen, Director, Bureau of Contracts & Accounts, 14th Floor, The Governor Alfred E. Smith State Office Building, Albany, N. Y., until ten-thirty o'clock A. M., advanced standard time, which is nine-thirty o'clock A. M., eastern standard time, on WEDNESDAY, JULY 10, 1946, for the construction and reconstruction of highway projects in the following counties:

County	Deposit for plans	Bid deposit	Type and miles	Dept. estimate
CONSTRUCTION				
Bronx	$20	$33,000	Grading and Structures Highway Sep. 2 Span I-Beam, 43' each. Highway Sep. 2 Span I-Beam 44' 3-1/16" each.....0.26	$650,000
Nassau	20	30,000	Elliptical Arches, 79', 74', 76' Conc. Rigid Frame 82' Grading and Structures...0.50	570,000
RECONSTRUCTION				
Schoharie	10	50,000	46'-48' Conc. 8" thk. 2 @ 24'.........4.99	892,000
Westchester	10	65,000	Conc. 8" thk., 24' wdt...........3.01	1,143,000
Westchester	5	2,500	Rustic Timber Guide Railing	43,000

Maps, plans, specifications, and estimates may be obtained at the office of the Department of Public Works, Bureau of Contracts & Accounts, Albany, N. Y., and at the office of the District Engineers in whose district the roads are located. The names and addresses of the District Engineers will be furnished on request, and may be seen at the office of the State Department of Public Works, State Office Building, Room 898, Worth & Center Streets, New York City.

The deposit for Plans and Proposal Forms for each contract containing 1 to 15 sheets is $5.00; 16 to 30 sheets, $10.00; over 30 sheets, $20.00. A refund will be made in full to bidders for return of one set, in good condition, within 30 days of award, or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications, and contract agreement, and to the special provisions applying to projects financed with federal funds.

Proposal for each contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. Each proposal must be accompanied by cash, draft or certified check payable to the order of "State of New York, Commissioner of Taxation & Finance" for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders."

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type upon which the proposal is predicated.

Minimum Wage Rate per hour for above work shall be as follows:

County	Skilled Labor	Intermediate Grade Labor	Unskilled Labor
Bronx	$1.45	$1.20	$1 20
Nassau	1.25	1.00	1.00
Schoharie	0.75	0.75	0.75
Westchester	1.25	1.14/2:7	1.14/2:7

UNLESS SHOWN OTHERWISE IN THE ITEMIZED PROPOSAL FOR EACH PROJECT. The right is reserved to reject any or all bids.

CHAS. H. SELLS
SUPT. OF PUBLIC WORKS

U. S. Government

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 12, 1946. Sealed bids (Specifications No. 1389) will be received at the office of the Bureau of Reclamation, Bend, Oregon, until 10 a.m., July 15, 1946, and then publicly opened, for furnishing labor and materials and performing all work for the *construction of earthwork and structures, laterals M-45, M-48, M-49, M-50, M-51, M-51A, M-51B, M-52, M-53A, M-53B, M-54, M-55, M-56, M-56A, and sublaterals, Deschutes Project*, Oregon. The work is situated in the vicinity of Madras, Oregon, and 7 miles south thereof. The principal items of work and the estimated quantities involved are as follows: 80,000 cubic yards of excavation, common, for laterals; 2,000 cubic yards of excavation, rock, for laterals; 5,000 station cubic yards of overhaul; Compacting 1,000 cubic yards of embankments; 7,000 cubic yards of excavation, common, for structures; 500 cubic yards of excavation rock, for structures; 3,000 cubic yards of backfill; compacting 1,600 cubic yards of backfill; 1,400 cubic yards of concrete in structures; Placing 100,000 pounds of reinforcement bars; 200 square yards of dry-rock paving; Erecting 32 M feet b.m., of timber in structures; Laying 1,000 linear feet of 18-inch diameter standard strength concrete pipe; Laying 650 linear feet of 24-inch diameter standard strength concrete pipe; Laying 60 linear feet of 30-inch diameter standard strength concrete pipe; Laying 600 linear feet of 36-inch diameter standard strength concrete pipe; Laying 530 linear feet of 24-inch diameter extra strength concrete pipe; Laying 100 linear feet of 15-inch diameter corrugated metal pipe; and Installing 25,000 pounds of gates and miscellaneous metalwork. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. The work shall be commenced within thirty (30) calendar days after date of receipt of notice to proceed and shall be completed within two hundred (200) calendar days from the date of receipt of such notice. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Liquidated damages for delay will be one hundred dollars ($100) per day. Partial payments will be made monthly. (See Article 16 of the contract.) No charge to prospective bidders for copies of the specifications and drawings; to others $2.25 per copy, not returnable. For particulars, address the Bureau of Reclamation, Bend, Oregon; Denver 2, Colorado; or Washington 25, D. C.

Michael W. Strauss,
Commissioner.

(140)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 7, 1946. Sealed bids (Specifications No. 1384) will be received at the office of the Bureau of Reclamation, Denver, Colorado, until 2 p.m., July 29, 1946, and will at that hour be opened, for furnishing and delivering f.o.b. cars at the shipping point or f.o.b. cars at Odair, Washington, at the option of the bidder. three (3) 40,000-kva, 13,600- to 66,400/115,000 Y-volt, single-phase, oil-immersed, outdoor type transformers with water-cooled external heat exchangers, for unit L-9; for Grand Coulee Powerplant, Columbia Basin Project, Washington. The apparatus will be installed by the Government. The specifications do not contain a provision for liquidated damages for delay. No charge for copies of the specifications to prospective bona fide bidders; to others $1.00, not returnable. For particulars, address the Bureau of Reclamation, Denver 2, Colorado, or Washington 25, D. C.

Michael W. Strauss,
Commissioner.

(139)

U. S. Government

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation, Washington, D. C., June 7, 1946. Sealed bids (Specifications No. 1375) will be received at the office of the Bureau of Reclamation, Denver, Colorado, until 10 a.m., July 10, 1946, and then publicly opened, for furnishing labor and materials and performing all work for the *construction of Alamogordo Air Base tap to Alamogordo substation 115 kilovolt transmission line, Rio Grande Project*, New Mexico-Texas. The work is situated in the south central portion of the State of New Mexico. The transmission line to be constructed under these specifications will be 115,000-volt, three-phase, 60-cycle single-circuit, wood-pole, H-frame type transmission line, and will extend from the point of connection of the Alamogordo Army Air Base tap to the Alamogordo substation at Alamogordo, New Mexico. The transmission line has been designed for medium-loading conditions of one-quarter of an inch of ice and a wind pressure of 8 pounds per square foot at 15° F. The conductors for the lines will be either No. 4/0 A.W.G. aluminum cable, steel-reinforced, or 133,100-circular mil copper conductor of hollow construction. Each pole of each structure will be provided with a ground wire, and two overhead ground wires will be strung for one-half mile from the Alamogordo substation. Unless otherwise specified, all construction and clearances of the transmission line to be constructed under these specifications shall conform to the fifth edition of the National Electrical Safety Code issued by the United States Bureau of Standards. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. The work shall be commenced within fifteen (15) calendar days after date of receipt of notice to proceed and shall be completed within one hundred (100) calendar days from the date of receipt of such notice. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Liquidated damages for delay will be fifteen dollars ($15) per day for earh calendar day's delay. Partial payments will be made monthly. (See Article 16 of the contract.) No charge to prospective bidders for copies of the specifications and drawings; to others $2.50 per copy, not returnable. For particulars, address the Bureau of Reclamation, U. S. Courthouse, El Paso, Texas; Denver 2 Colorado; or Washington 25, D. C.

Michael W. Strauss,
Commissioner

(137)

UNITED STATES DEPARTMENT OF THE INTERIOR, Bureau of Reclamation Washington, D. C., June 11, 1946. Sealed bids (Specifications No. 1361) will be received at the office of the Bureau of Reclamation, Denver, Colorado, until 2 p.m., July 11, 1946, and will at that hour be opened, for furnishing and delivering fol cars at the shipping point or fob cars at Odair, Washington, at the option of the bidder, aluminum folding doors for service bay RS; aluminum framing members for glass-block windows, units R1 to R9, inclusive, and service bay RS; in the Grand Coulee Powerplant, Columbia Basin Project, Washington. All of the materials will be installed by the Government. The specifications contain a provision for liquidated damages for delay. No charge for copies of the sperifications to prospective bona fide bidders; to others $1.00, not returnable. For particulars, address the Bureau of Reclamation, Denver 2, Colorado; or Washington 25, D. C.

Michael W. Strauss,
Commissioner.

(138)

U. S. Government

BIDS FOR CLEANING AND SNAGGING DITCH: War Dept., Corps of Engineers, 120 Wall St., New York 5, N. Y.—Sealed bids will be received in Room 601 until 2:00 P.M., 23 July 1946 and then publicly opened, for furnishing all plant, labor, materials and equipment and performing all work for the cleaning and snagging of Pequannoch Township Ditch, Lincoln Park and Pequannoch Township, Morris County, New Jersey: further information on application. (141)

OFFICIAL PROPOSALS

Bids: July 22 (115)

Bridge Substructure

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ROUTE S-3, PASSAIC RIVER BRIDGE
(SUBSTRUCTURE)

Construction of the substructure of the bridge across the Passaic River in Clifton and Rutherford, Passaic and Bergen Counties, on State Highway Route S-3, Federal Aid Project No. U-186 (2). The work involves the construction of two abutments, two bascule trunnion piers, four intermediate piers, and a timber fender system. The principal items of construction are: Estimated:

2,500	cu. yds. foundation excavation
15,162	lin. ft. steel bearing piles
325,700	lbs. reinforcement steel
9,094	cu. yds. concrete
475	cu. yds. granite facing
10,150	lin. ft. treated timber piles
73.6M.	ft. B.M. treated timber

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Monday, July 22, 1946, at ten A.M., EASTERN STANDARD TIME, (eleven o'clock, DAYLIGHT SAVING TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements, and by Sections 2, 3 and 4, P. S. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the State Employment Service, 68 Union Avenue, Clifton, N. J. The attention of bidders is directed to the special provisions covering subletting or assigning the contract and to the use of domestic materials. The minimum wage paid to all unskilled labor employed on this contract shall be 65c per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 75c per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application.

OFFICIAL PROPOSALS

Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

Bids: July 22 (144)

State Highway Work

STATE OF NEW JERSEY
STATE HIGHWAY DEPARTMENT
TRENTON

NOTICE IS HEREBY GIVEN that sealed bids will be received by the State Highway Commissioner for:

ROUTE 6, SECTION 22A

Construction of Route 6, Section 22A, from Route 23 to Union Avenue, Wayne Township and Totowa Borough, Passaic County, Federal Project FI-88(11), length 1.432 miles. Estimated:

	Roadway Items
81,700	cu. yds. roadway excavation-earth
17,200	sq. yds. pavement excavation
67,400	cu. yds. borrow excavation
12,200	sq. yds. 8" concrete base course
14,000	sq. yds. 2" pavement, type CA-BC-1
66,000	sq. yds. 10" rein. con. pavement surface, excluding joints
8,000	in. ft. transverse joints
	Bridge Items
262	cu. yds. concrete in structures
20,160	lbs. reinforcement steel in structures

Bids for the above will be received at the office of the State Highway Department, Room 102, State House Annex, Trenton, N. J., on Monday, July 22, 1946, at ten A.M., EASTERN STANDARD TIME, (eleven o'clock, DAYLIGHT SAVING TIME), and will be opened and read immediately thereafter.

The receipt and opening of bids is subject to the proper qualification of the bidder in accordance with the provisions of the prequalification law and the regulations adopted by the State Highway Commissioner. Bidders must also submit a revised financial statement and statement of plant and equipment with their bid.

NOTE: The proposed project is a "Federal Aid Project" authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements, and by Sections 2, 3 and 4, P. S. 521, 78th Congress, and is to be performed in accordance with the special provisions and requirements of the Federal Works Agency, Public Roads Administration, as outlined in the specifications, which provisions require that labor be employed from lists furnished by the United States Employment Service, 219-229 Ellison Street, Paterson, N. J. The attention of bidders is directed to the special provisions covering subletting or assigning the contract and to the use of domestic materials. The minimum wage paid to all unskilled labor employed on this contract shall be 65c per hour. The minimum wage paid to all intermediate grade of labor employed on this contract shall be 75c per hour. The minimum wage paid to all skilled labor employed on this contract shall be $1.25 per hour.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, N. J., and may be inspected by prospective bidders during office hours. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each set of plans upon application to A. Lee Grover, Chief Clerk, State Highway Department, Room 102, State House Annex, Trenton, N. J. Bids must be made upon the standard proposal forms in the manner designated in the standard State Highway specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and work bid upon on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten percent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and must be delivered at the above place on or before the hour named. Copies of the standard proposal forms and special addressed envelopes will be furnished on application. Bids not enclosed in sealed special addressed envelopes will be considered informal and will not be opened. The right is reserved to reject any or all bids.

Signed: Spencer Miller, Jr.
State Highway Commissioner

EMPLOYMENT

WANTED

DESIGNERS and DRAFTSMEN

Excellent opportunities with long-term employment for able designers and draftsmen experienced on steel and concrete bridges.

Howard, Needles, Tammen & Bergendoff
Consulting Engineers
55 Liberty Street, New York 5, N. Y.

DESIGN AND DRAFTING ENGINEERS

Positions open with South Dakota Highway Commission Plans Department.

Experienced men with ability in drafting, Final Plans, preparation and Right-of-Way maps wanted.

Positions permanent for well qualified men.

Write South Dakota Highway Commission, Pierre, South Dakota, giving experience and salary desired, first letter.

LONG-ESTABLISHED MACHINERY MANUFACTURER IN EASTERN PENNA.

WANTS

Engineers, Designers, Draftsmen and Estimators to work on Cement, Lime and other Rock Products Plants; also Sugar Mills, Locomotives and Mining Machinery.

Your reply giving outline of experience, salary required, etc., will receive prompt consideration and be held confidential. If an interview is requested by us transportation expenses will be reimbursed. Location in home office. Wilkes-Barre, Pa.

Address

P-675, Engineering News-Record
330 West 42nd St., New York 18, N. Y.

WANTED

Structural Steel and Reinforcing Steel Designers, Draftsmen, Checkers, and Estimaters.

DES MOINES STEEL COMPANY
Box 956 Des Moines, Iowa

EXECUTIVE ENGINEER or CONSTRUCTION ENGINEER

Age 42, with 21 years experience on supervision of major construction work; experience includes all phases of building construction, housing; highway, sewer & water work, bridges, grade crossing eliminations; just completed assignment in charge of Big Inch Pipeline maintenance for U. S. Government. Available July 1.

PW-626, Engineering News-Record
520 N. Michigan Avenue, Chicago 11, Ill.

SEARCHLIGHT SECTION

POSITIONS VACANT

ENGINEERS EXPERIENCED in design of water and sewage treatment projects. Structural design ability important and good drafting essential. Please include full data as to experience, references, availability and approximate salary requirement in first letter. Recent photograph and work samples helpful. Jones & Henry, 821 Security Building, Toledo 4, Ohio.

WANTED: By State Highway Commission in Middle West, several experienced designers in reinforced concrete and steel bridge design. Permanent position. Give complete details of experience and salary expected. P-627, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

ARCHITECT IN southern seacoast city needs capable, experienced man. Some design and coordination of other work in drafting room, disposition to work and work with other men. Office does not specialize, work is varied and includes various types of buildings. State in reply age, education, experience, references, marital status, salary desired, etc. Good opportunity for proper man who is not afraid of work. P-628, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WANTED ENGINEER with experience in field and office work on highway construction. Must be accomplished instrument man and capable of acting as chief of party and inspector. Will consider recent engineer graduate with thorough knowledge of surveying. Location south central New York State. Give training, experience, salary expected and date available. P-629, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ENGINEER OR Architect to detail industrial buildings. Only top men apply. P-633, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

MECHANICAL ENGINEER to lay out heating, plumbing on industrial buildings; must be able to carry through from lay-out to completion; top salary to right man. P-635, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR WANTED with college engineering or practical experienced background. Young man under 38 preferred. Position consists of estimating, purchasing and assisting general contractor. Fine opportunity for advancement. General contracting firm is located in Northwestern Ohio and is rapidly expanding specializing in federal, public and industrial work. Give references, stating age, salary desired, also photograph preferred with inquiry. P-638, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

STRUCTURAL ENGINEERS: Thoroughly experienced in structural steel and concrete design or engineering promotional and educational work. Good personality together with willingness and ability to meet people needed. Age 30 to 40. Give full details in reply. Location New York State. P-660, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER: Minimum 5 years structural experience for sales engineering and promotion with engineers and architects. Permanent position. Some traveling. Location Michigan. P-661, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

WANTED: Detailers, checkers, sales engineer. Structural steel, miscellaneous and ornamental iron, reinforced concrete. Experienced only. All types buildings and bridges. Best working conditions in Southwest. Good future for permanent men who qualify. Write Capitol Steel & Iron Company, P. O. Box 2487, Stockyard Station, Oklahoma City, Oklahoma.

CONTRACTOR'S ENGINEER or superintendent or architect's field superintendent. Applicants will also be considered who have large country estate maintenance experience. To be in charge of planning and direction of maintenance and some construction. No design required. Position is a responsible one, requiring a pleasant personality and ability to handle employees and to meet the public. Location: New York City. Permanent position for the right man. P-663, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PLANE TABLE Topographer wanted. Must have had at least five years experience doing topograph on scale of two hundred feet to the inch or larger. Also must be able to establish both horizontal and vertical control. Starting salary $300.00 per month and field expenses. P-679, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

FIELD ENGINEER for heavy construction job, field work layout, excellent wages, permanent job and opportunity for advancement. P-680, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

POSITIONS VACANT

TIMEKEEPER-CLERK for contractor's field office. Must be fast and accurate at figures. Some typing, excellent wages, permanent job and opportunity for advancement. P-681, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

STRUCTURAL DETAILERS: experienced in mill and office buildings and bridges. Permanent work with lots of overtime for good men. Summer Engineering Co., 239 Fourth Ave., Pittsburgh, Pa.

WANTED ENGINEERS experienced in design of water works and sewage treatment projects. Only men with top qualifications should apply. Also, architect and architectural draftsmen. Salary will be in proportion to qualifications. Applicants should include complete experience record, references, and approximate salary requirements. State age, education and include photograph. Assignment will be in the Southeastern states or tropics. P-682, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT: wanted, capable of taking complete charge of well point system dewatering, on project in mid-west. State experience and salary expected. Mark C. Walker & Son Co., 412 First National Bank Building, Santa Ana, California.

STRUCTURAL DESIGNER: for permanent position with consulting engineering firm in Dallas, Texas. Must be experienced in design of building frames for architects. Only thoroughly experienced and energetic men need apply. Conversational positions are already filled and none but serious workers need apply. Replying state education, experience, and references. Salary $400.00 per month. P-683, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

THE CONNECTICUT State Department of Health and the State Water Commission are seeking Sanitary Engineers. Salary range $2640-$3600 per annum. Connecticut residence is not required. Applications must be on file or postmarked not later than July 31, 1946. For further details and application forms write Personnel Department, State Capitol, Hartford, Connecticut.

DETAILERS AND Checkers: structural steel fabricating shop experience only; vacations, overtime; Herrick Iron Works, 1734 Campbell St., Oakland.

POSITIONS WANTED

CONSTRUCTION SUPERINTENDENT: Broad experience power and industrial plants. Deep foundation, mass and reinforced concrete. Responsible charge of large operations. PW-614, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT FOR nationally known engineering and construction firm drawing highest salary in district with following of key men will make change shortly. Own some equipment now rented to company. 20 years monumental, heavy and commercial construction. 5 years Central America. Preferred location within 15 degrees of equator. Salary $8500 per year clear of taxes plus all expenses. Interview will cost you $50.00 per day and round trip plane fare from middle West. PW-634, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CHIEF AUDITOR: now completing work on largest Ordnance Works in country desires position with reputable firm. Twenty-five years with leading engineering and construction firms in various positions of responsibility all types construction. Administrative and executive ability, experienced in handling joint venture and subcontractor accounts. References and bond, available inside thirty days. Will go any place. PW-642, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION AND maintenance manager. Commander U.S. Navy Construction and Maintenance Battalions (Seabees). Public works executive. Age 36, licensed professional engineer. Technical college graduate. 17 years training and experience. Supervision of design, construction and maintenance personnel large scale ($220,000,000) institutional and industrial facilities. PW-644, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

GENERAL SUPERINTENDENT: 42, Assoc. Mem. A.S.C.E. Desires position with general contractor. Consider foreign. Prefer waterfront work or hydro-electric developments. Experience includes twenty-five years dams, hydro-electric plants, docks, piers, shipbuilding basins, floating drydocks, water pumping stations, buildings, flood control and drainage. PW-610, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

MASTER MECHANIC: or supervisor, heavy duty construction equipment. 20 years experience. Available now. PW-670, Engineering News-Record, 68 Post Street, San Francisco 4, Cal.

POSITIONS VACANT

CIVIL ENGINEER: Graduate '36, 10 years experience field layout (transit and level) with inspection and partial supervision of construction on rolled-fill dams, concrete and steel structures, pumping stations, industrial plants, airports, pipe lines, harbors, and levees. A-1 record. Have some office and accounting experience. Interested in responsible connection with engineering firm or general contractor where a quiet, hardworking conscientious man is needed. South, Midwest, or West where wife can accompany. PW-665, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

SANITARY ENGINEER: Age 27, Lehigh graduate, advanced study, N.Y.U. hydraulic and airfield design 2 years with War Dept. Until recently, consulting sanitary engineer with USN, sup. CE, New York. On terminal leave as Lieut., CEC, USNR. R. B. Evans, 1 Birchwood Rd., Glen Rock, N. J.

DO YOU Need the services of a graduate engineer, age 36, with 13 years broad progressive experience in construction and civil engineering and 2 years valuable manufacturing association? I offer a competent background, field and office, in planning, design, estimating, specifications, contracts, reports, supervision, and administration. My aim is a permanent position, requiring initiative and offering advancement, with a consulting, construction or allied manufacturing firm. PW-666, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION SUPERINTENDENT: graduate engineer, twenty years experience qualified to supervise heavy construction, highways, and reinforced concrete structures. PW-668, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ARCHITECTURAL DRAFTSMAN desires position near San Diego, California. 18 years experience on complete working drawings for restaurants, residences, schools and public buildings. Available November 1st. PW-684, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

EXPERIENCED IN engineering research, report writing and editing: excellent writer with good knowledge of French. Ten years public relations with diplomatic experience in Washington. Seeks position in technical writing, research or editing, or in organizational or related work. Good personality. Associate Member, ASCE., 4 years with Army Engineer Corps, Military Intelligence Division. PW-685, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

GRADUATE CIVIL Engineer, 24, married. One year's civilian experience junior field engineer; three years with Seabees and overseas Navy Public Works (Lieutenant). Desire position offering future with general contracting or engineering firm. Available immediately. PW-686, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

BITUMINOUS SUPERINTENDENT: Age 37, seven years technical and practical experience on all types of bituminous highway construction. Desire position with contractor or oil company. PW-687, Engineering News-Record, 68 Post Street, San Francisco 4, Cal.

CONSTRUCTION SUPERINTENDENT: Civil engineer graduate, under 45 years old, with several years experience with well known building construction firm, desires connection with large or small, well established building construction company. PW-688, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER: 20 years experience design, construction, surveys, graduate sanitary engineering course. PW-689, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

GENERAL SUPERINTENDENT: Professional engineer, desires to make connection with company doing heavy construction. Twenty years experience water works, power plants, industrial plants, bridges, dams, tunnels, sewage disposals. Considerable time spent in Panama, Africa, Sicily, and Italy. Speak Spanish fluently—have my own organization. References and qualifications furnished upon request. Available November 1st. Harry M. Hunter, 333 West 10th Street, Erie, Penn.

GRADUATE CIVIL Engineer: 25, married, Cornell, 2 years structural design, also construction experience, desires position with contractor. Consider foreign. PW-690, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER: graduate, licensed, experienced in construction and municipal work. PW-691, 330 W. 42nd St., New York 18, N. Y.

GRADUATE ENGINEER: age 34. Eleven years structural and mechanical design and supervisory experience. Accustomed to assume responsibility. Desires association with progressive organization. PW-692, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PART TIME WORK WANTED

PROFESSIONAL CIVIL Engineer desires part time work. 25 years experience planning, designing, detailing and estimating concrete and steel structures. PTWW-622, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.